

# Notice of Allowability

Application No.

10/712,348

Examiner

Laura Edwards

Applicant(s)

KATSUOKA ET AL.

Art Unit

1734

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed as of 11/30/05.
2. ☒ The allowed claim(s) is/are 7, 9, 10, 18, and 33 renumbered as claims 1-5 respectively.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.


**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 120105
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date =
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other See Continuation Sheet.

  
LAURA EDWARDS  
PRIMARY EXAMINER

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An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with W. Douglas Hahm on 12/06/05.

The application has been amended as follows:

**In the claims:**

In claim 33, line 13, "substrate fixing head" has been changed to --substrate holding head--.

The following is an examiner's statement of reasons for allowance:

Claim 33 would be allowable because there is no teaching or suggestion in the prior art a substrate processing apparatus comprising the combination of loading/unloading area for a cleaning area for cleaning the substrate; a plating area for plating the substrate; wherein the plating area is provided with a pretreatment unit for pretreating the substrate before plating by bringing a treatment liquid into contact with the substrate, said pretreatment unit, including; a processing tank for holding a plating solution, a lid member for closing an opening of the processing tank after the substrate held in a substrate holding head is moved to above the opening, and a treatment liquid spraying section mounted on the lid member for spraying a cleaning liquid onto the substrate to clean the substrate while the opening of the processing tank

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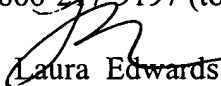
is closed with the lid member, said substrate holding head being provided with a tilting mechanism.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura Edwards whose telephone number is (571) 272-1227. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

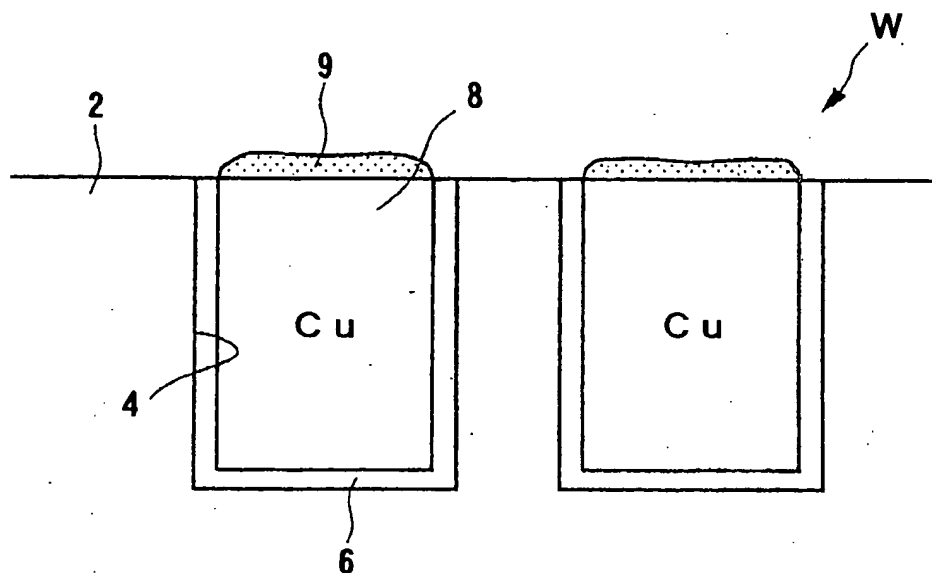
  
Laura Edwards  
Primary Examiner  
Art Unit 1734

Le  
December 6, 2005

Continuation of Attachment(s) 9. Other: The replacement drawings dated as of 5/19/05.



FIG. 1



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FIG. 2

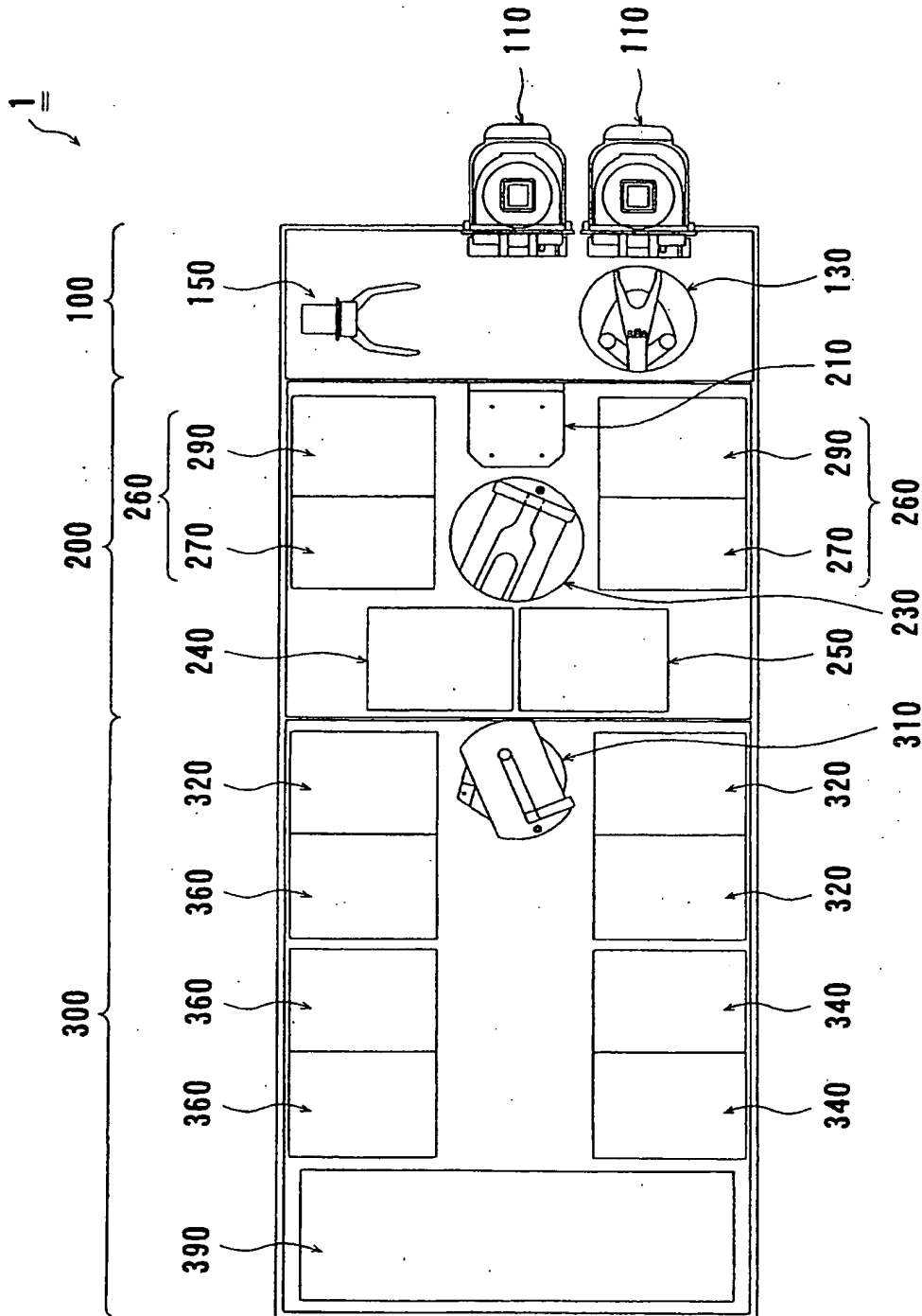


FIG. 3A

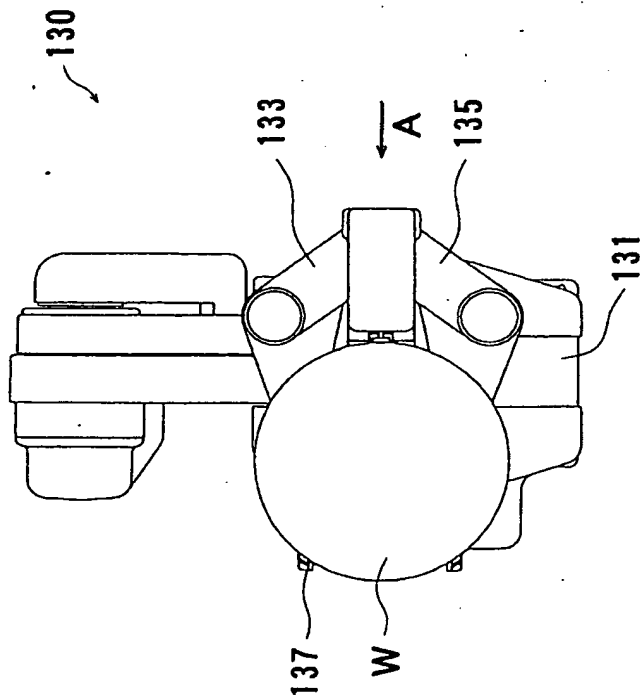


FIG. 3B

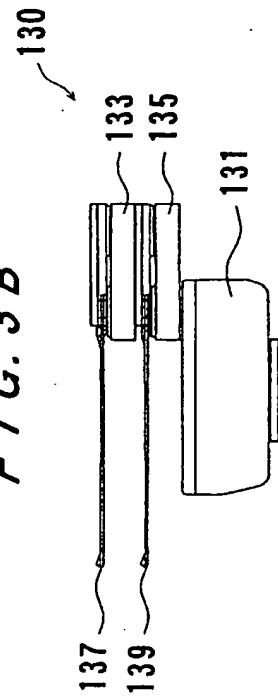


FIG. 3C

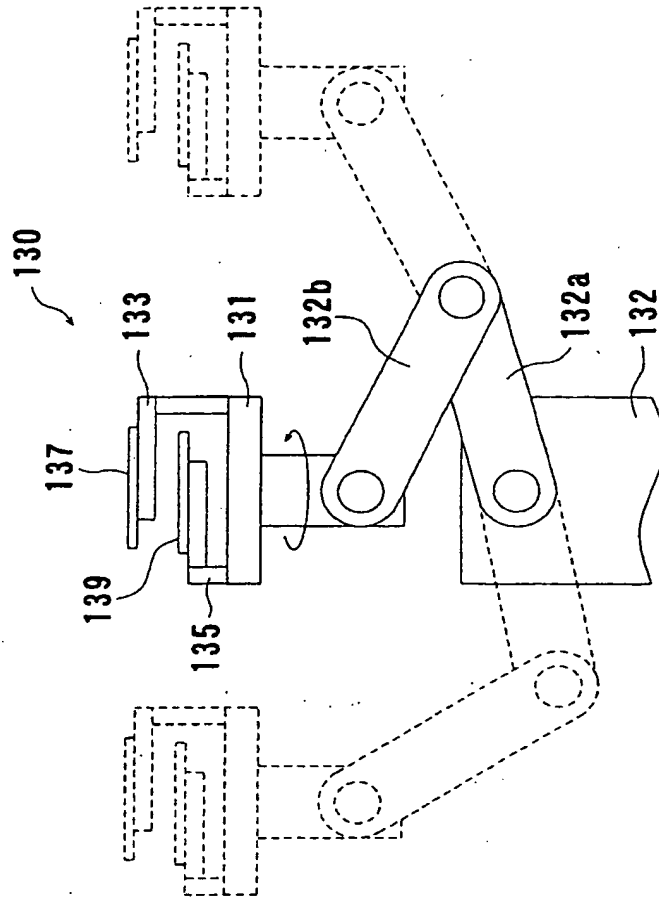


FIG. 4C

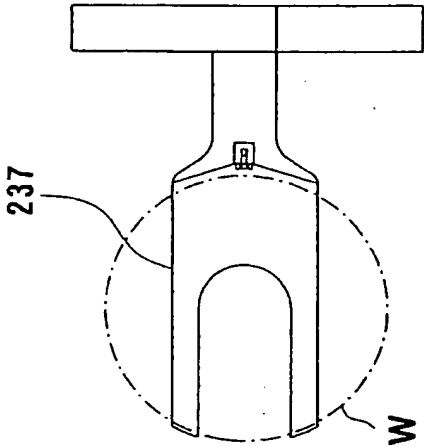


FIG. 4D

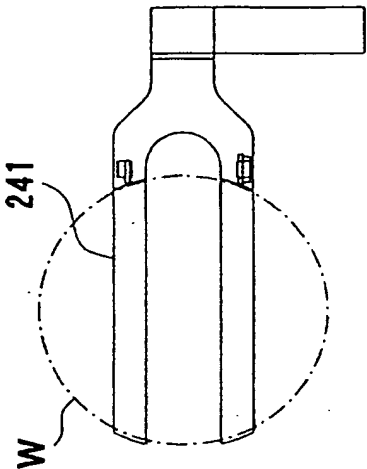


FIG. 4A

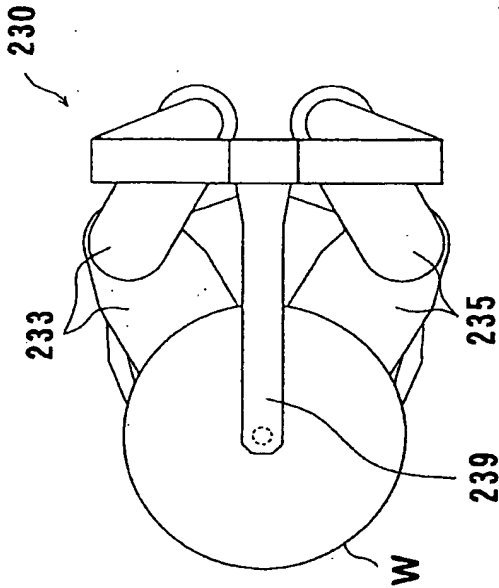


FIG. 4B

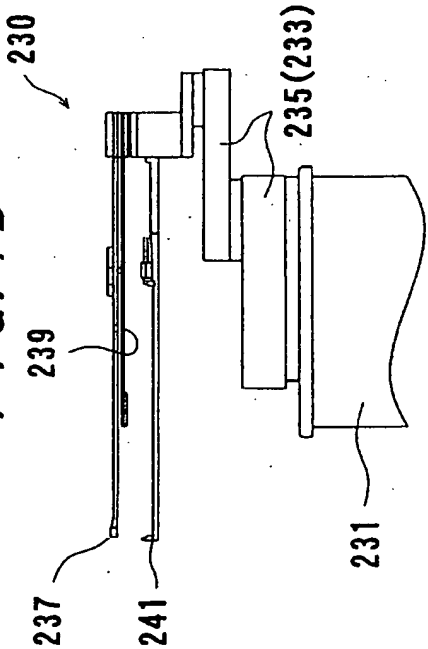




FIG. 5A

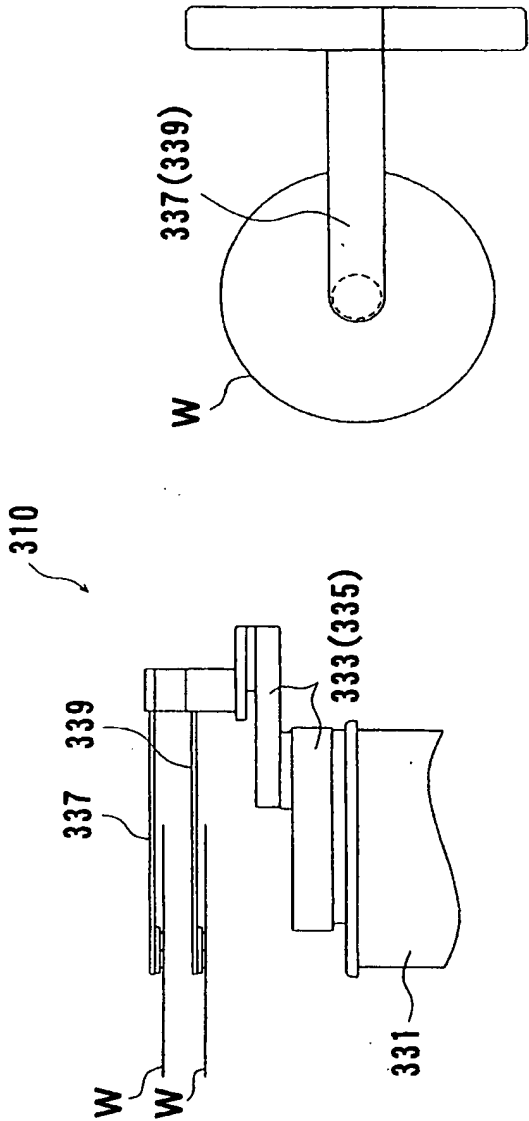
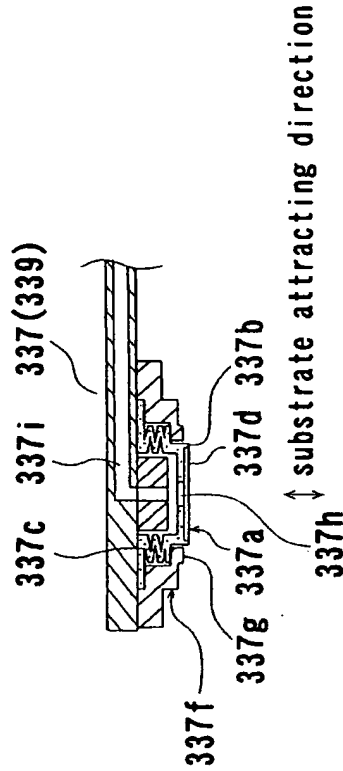


FIG. 5B



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FIG. 6A

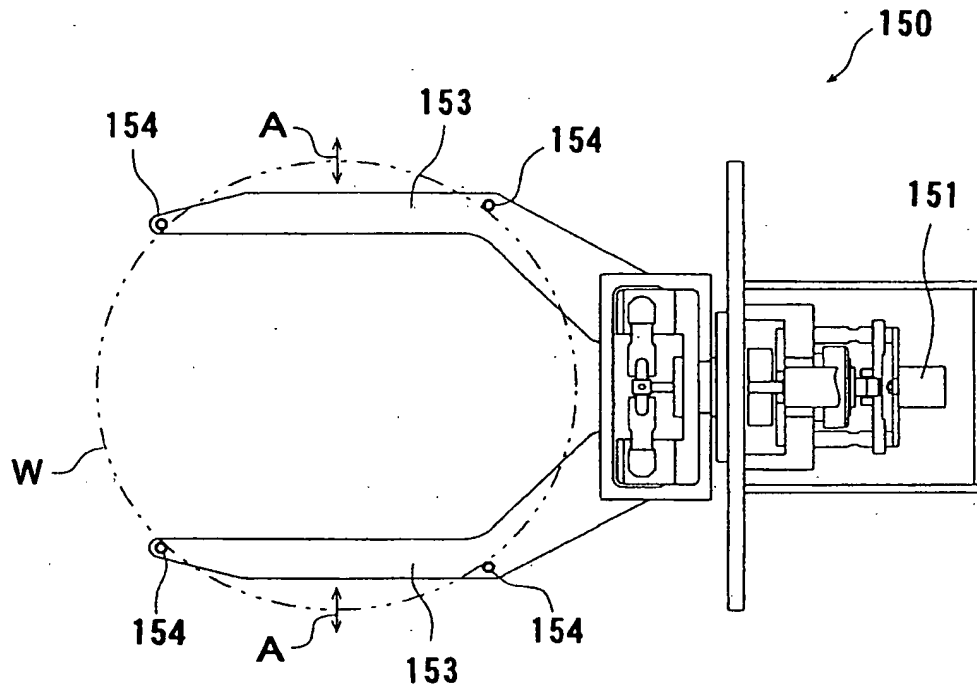


FIG. 6B

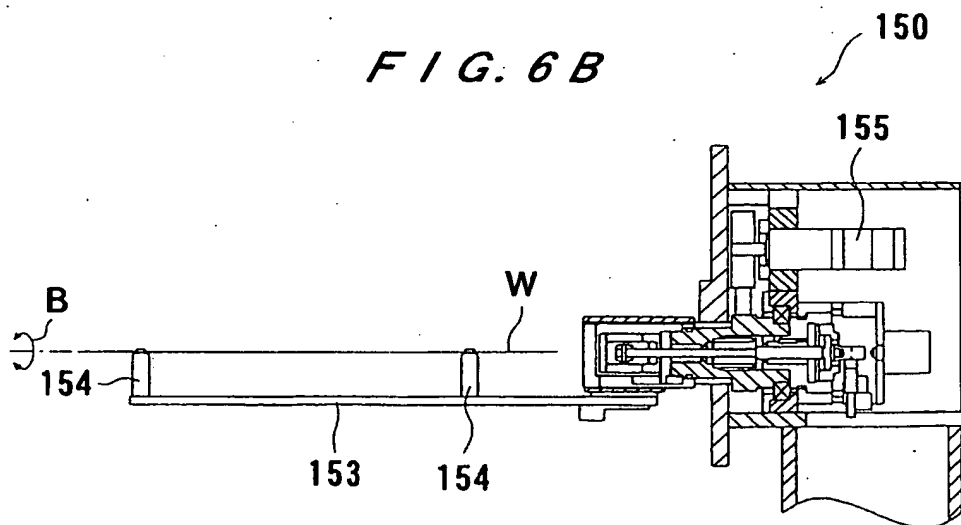


FIG. 7B

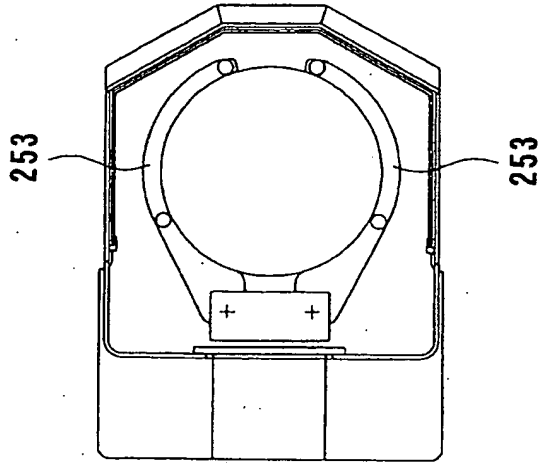
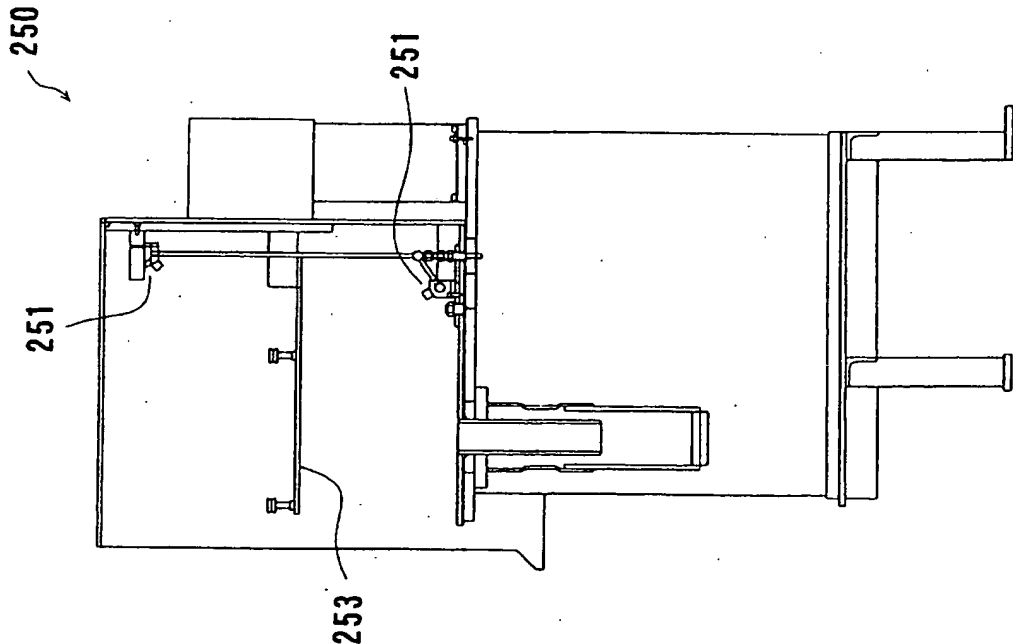


FIG. 7A



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FIG. 8A

FIG. 8B

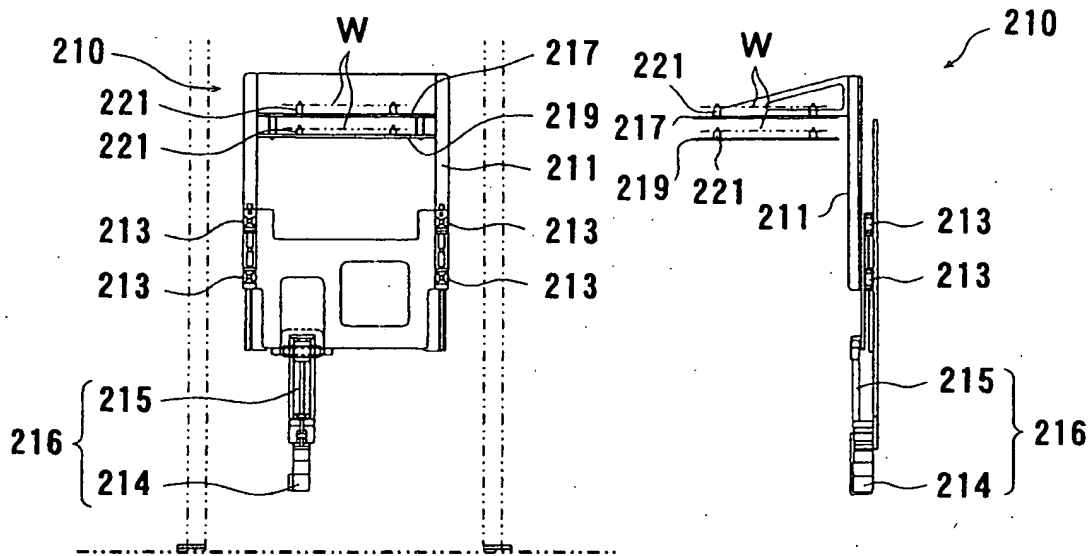
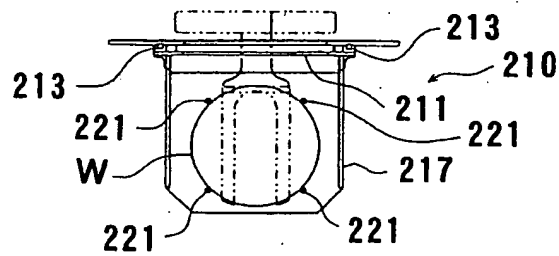
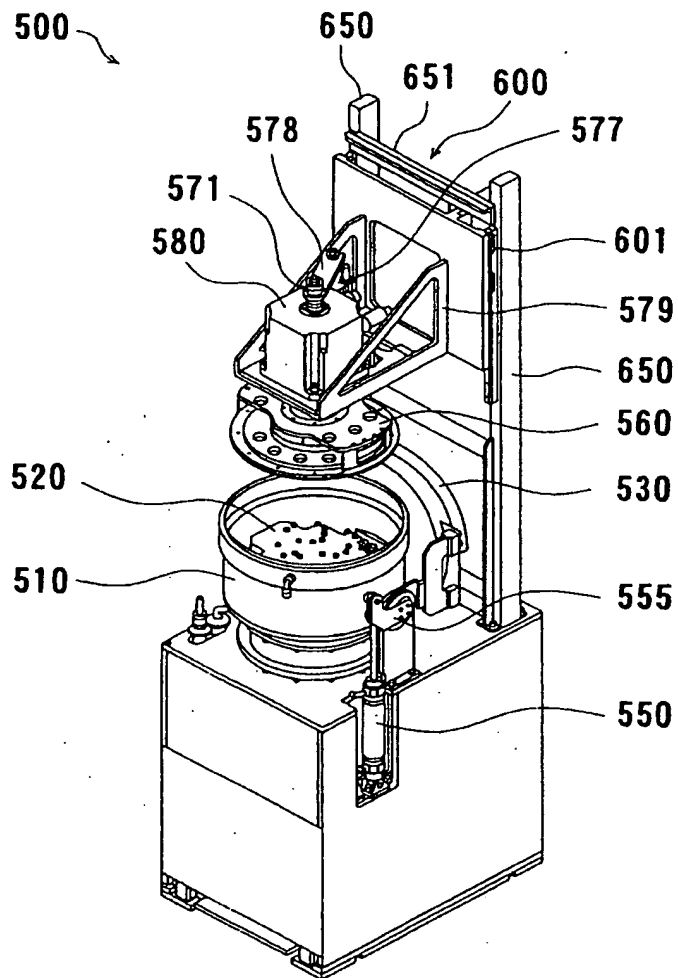


FIG. 8C



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FIG. 9



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FIG. 10B

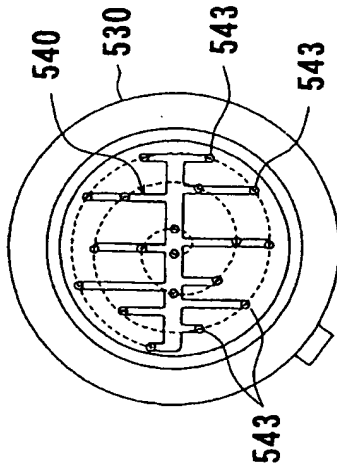


FIG. 10D

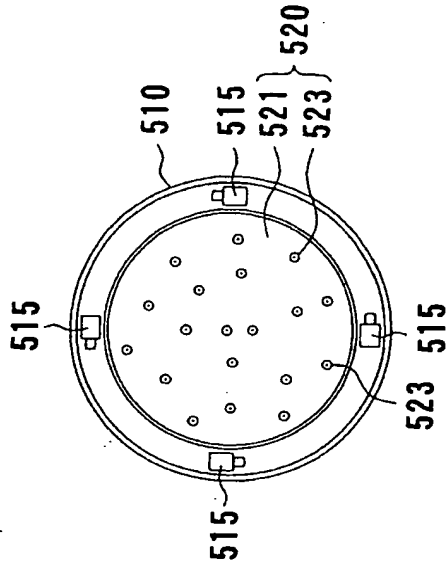


FIG. 10A

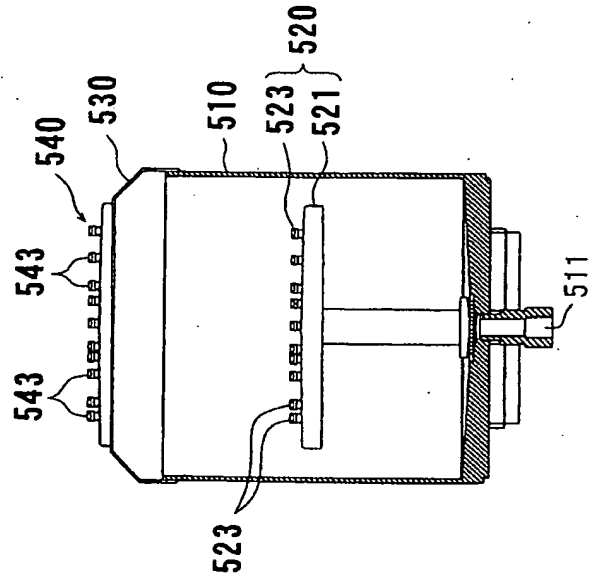
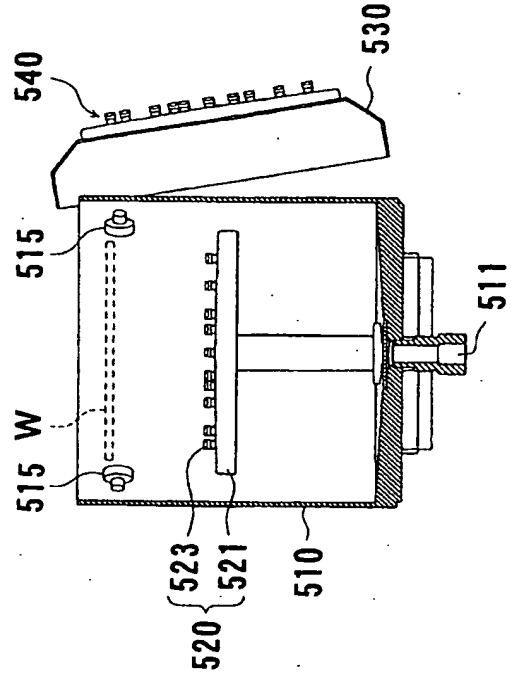


FIG. 10C



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FIG. 11B

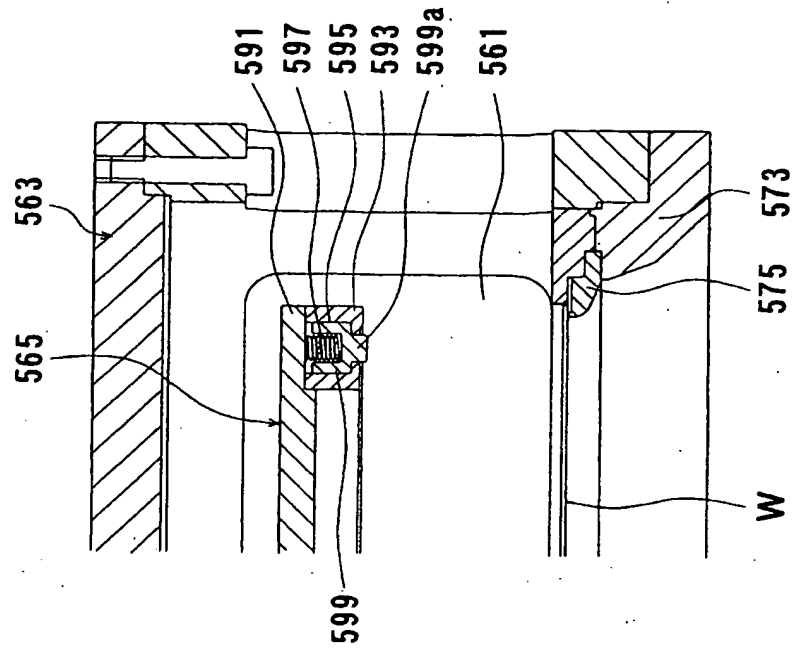
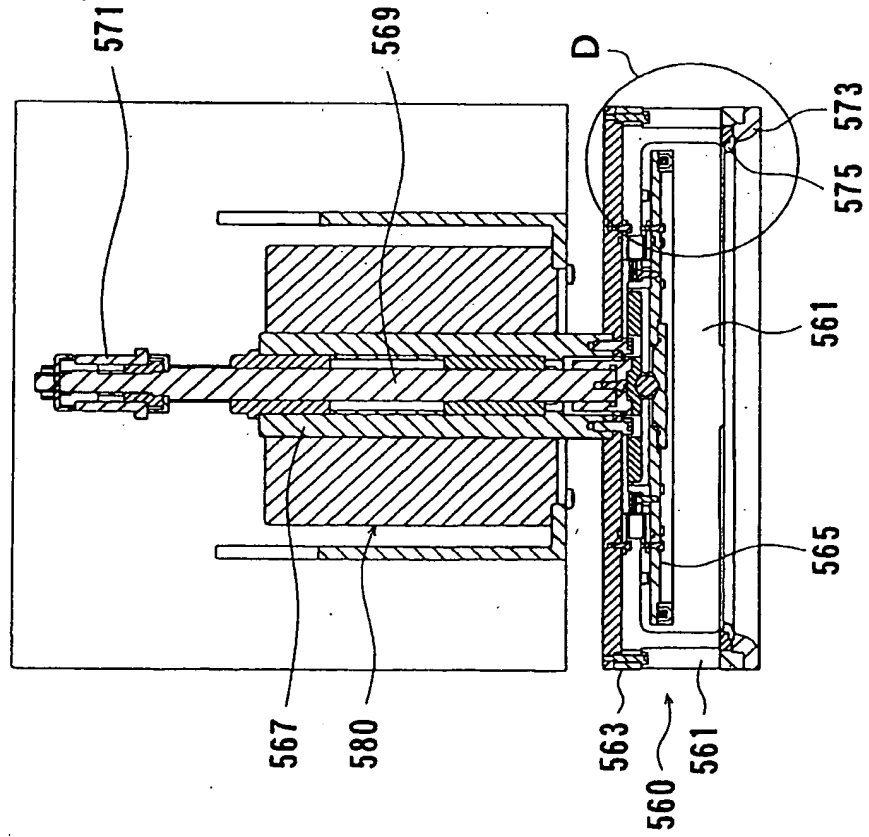


FIG. 11A



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FIG. 12B

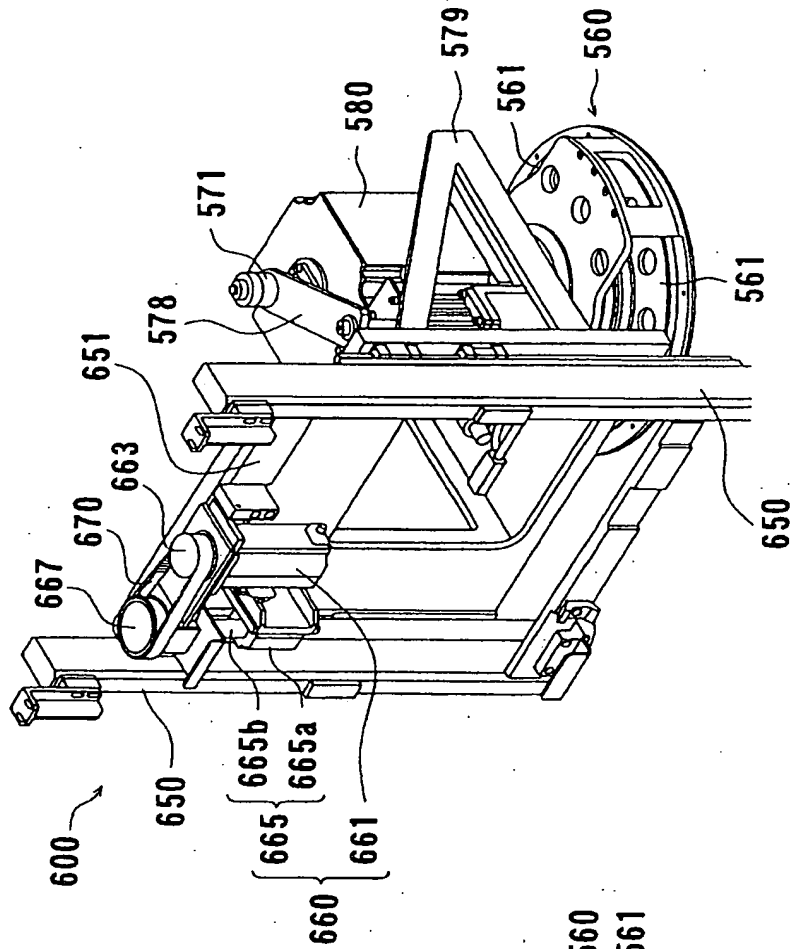
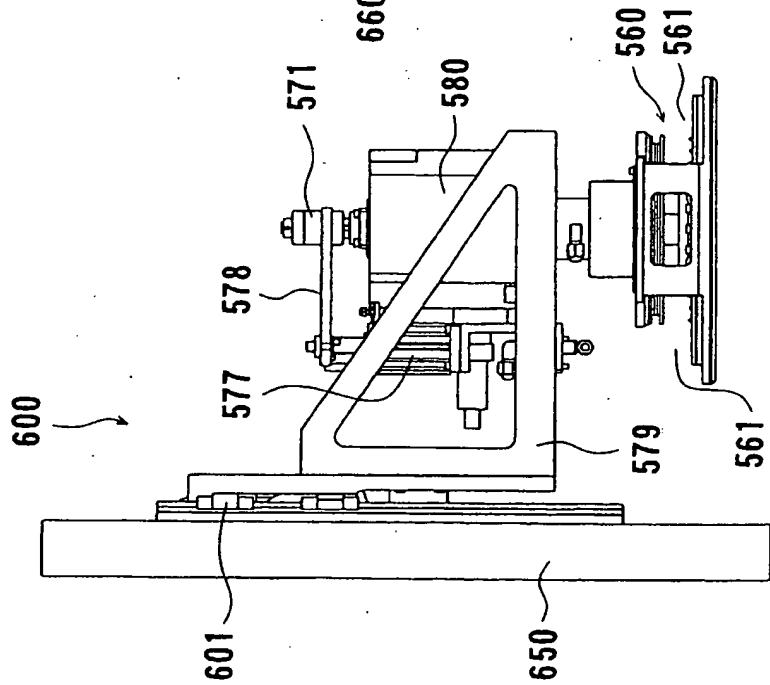


FIG. 12A





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FIG. 13

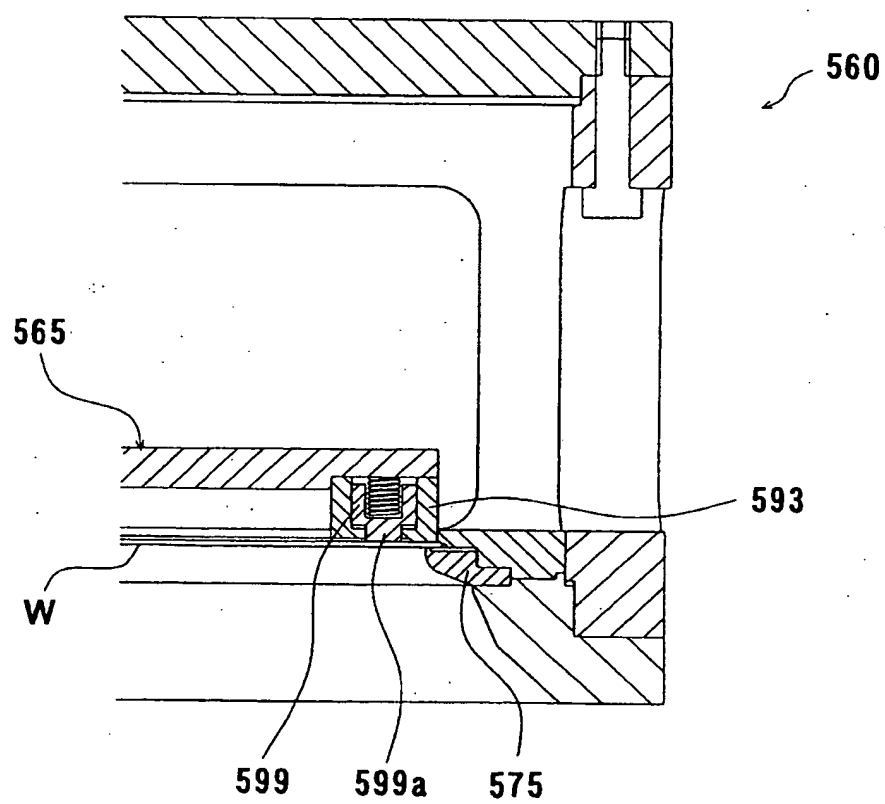


FIG. 14B

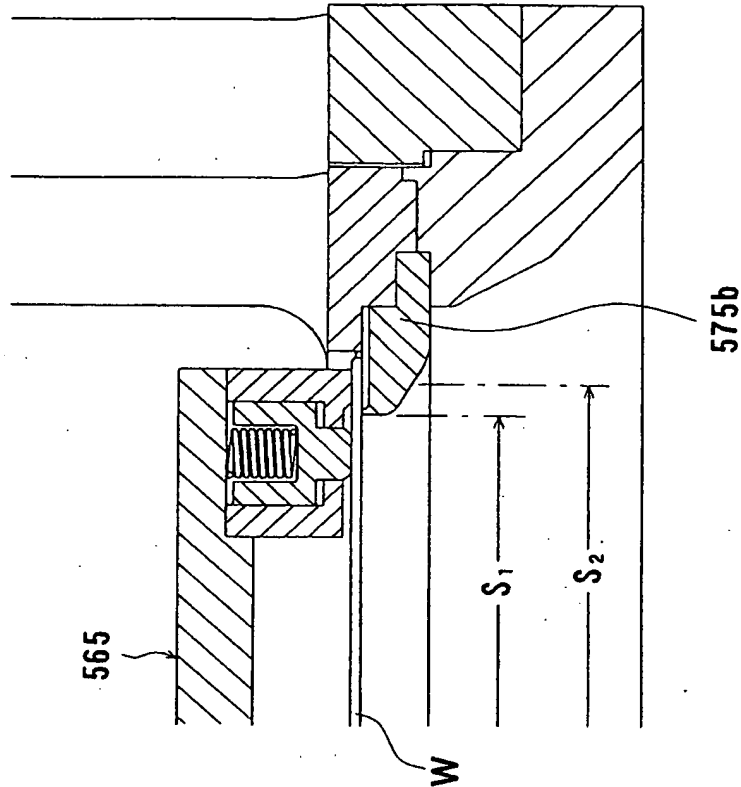
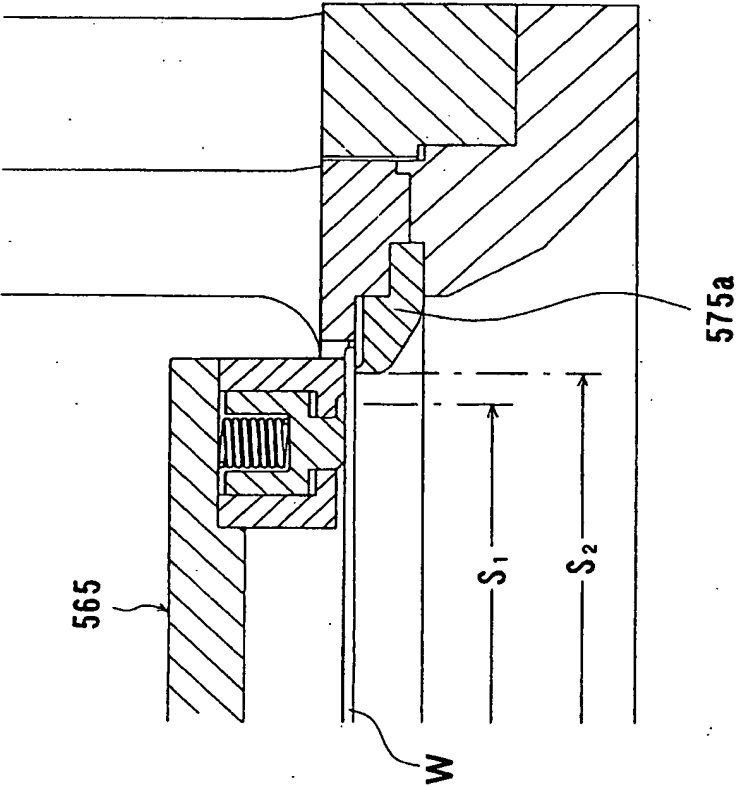
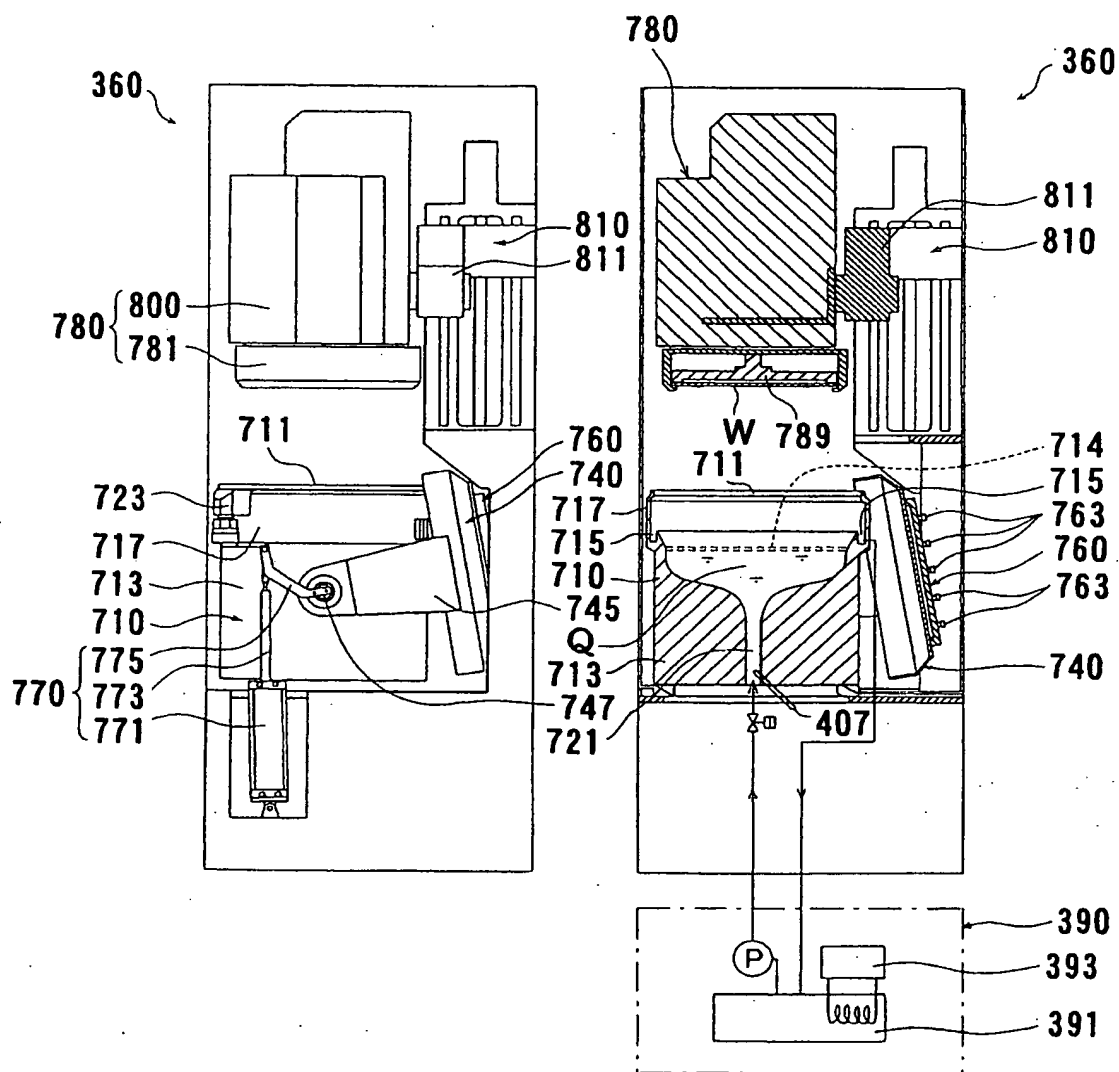


FIG. 14A

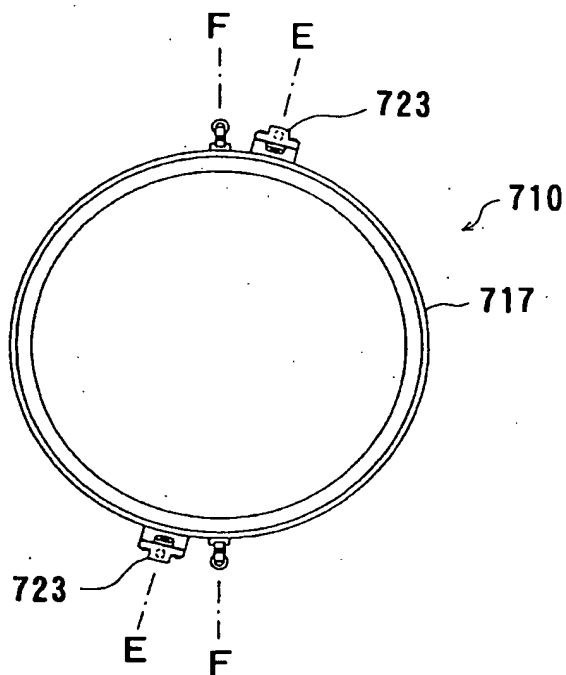


**FIG. 15B**



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*FIG. 16A*



*FIG. 16B*

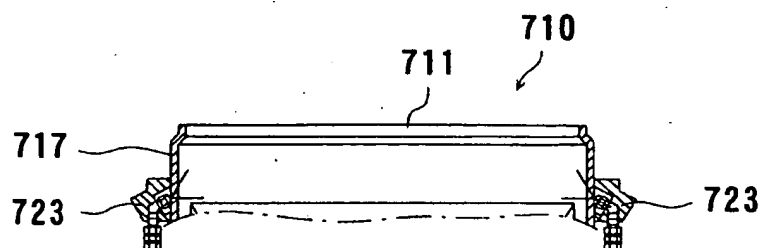


FIG. 17

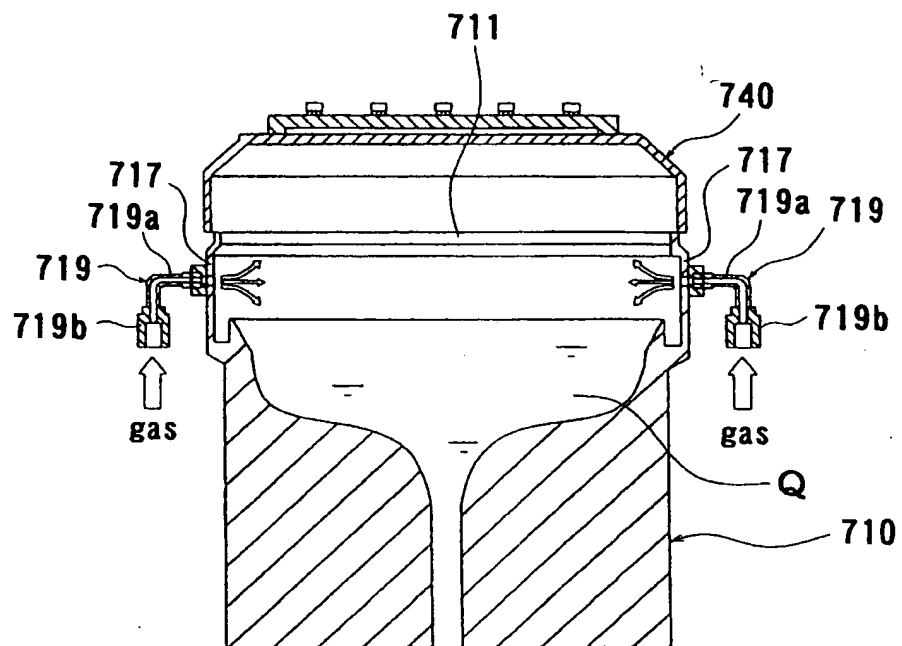
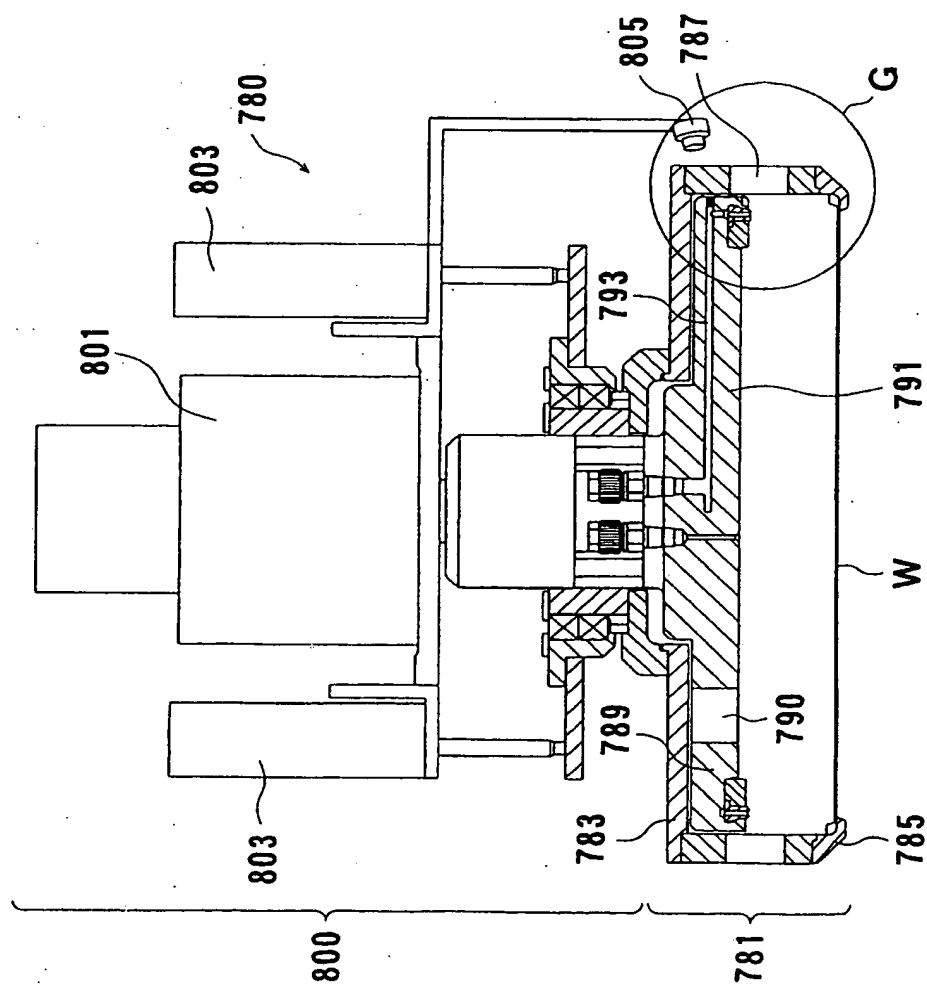
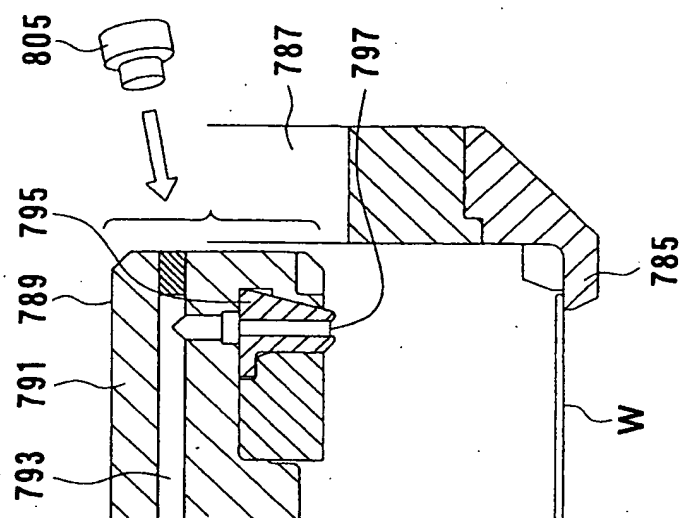


FIG. 18A



**FIG. 18B**





**FIG. 20A**

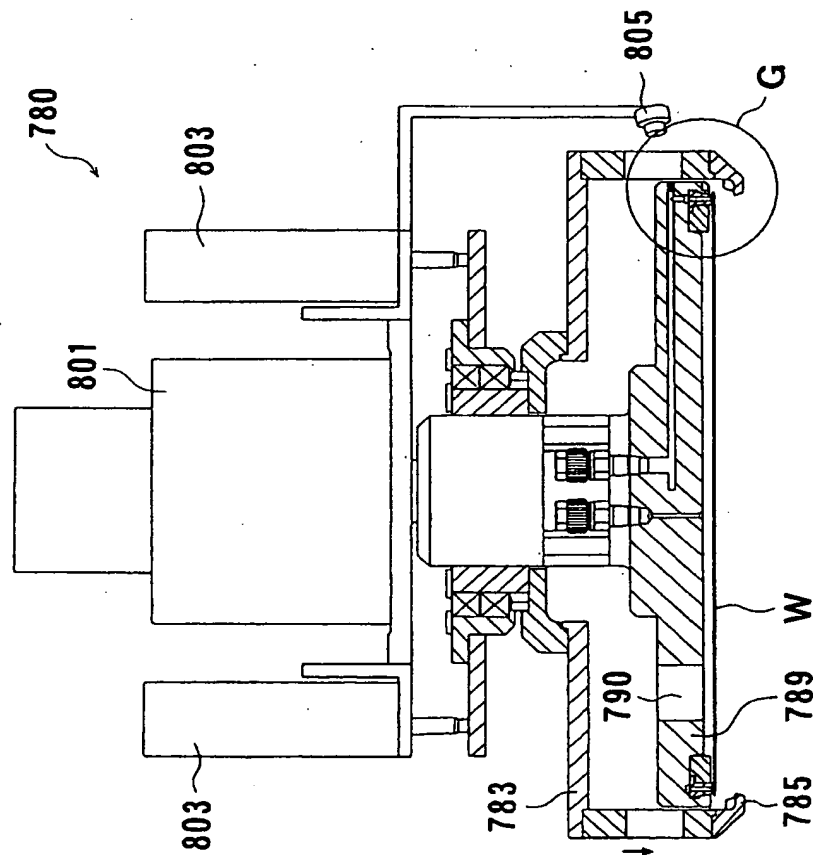
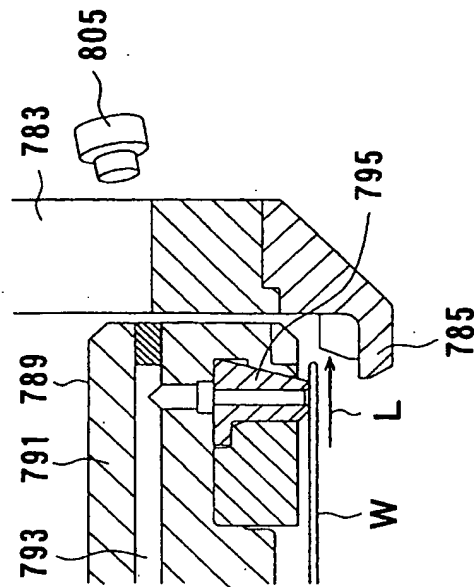


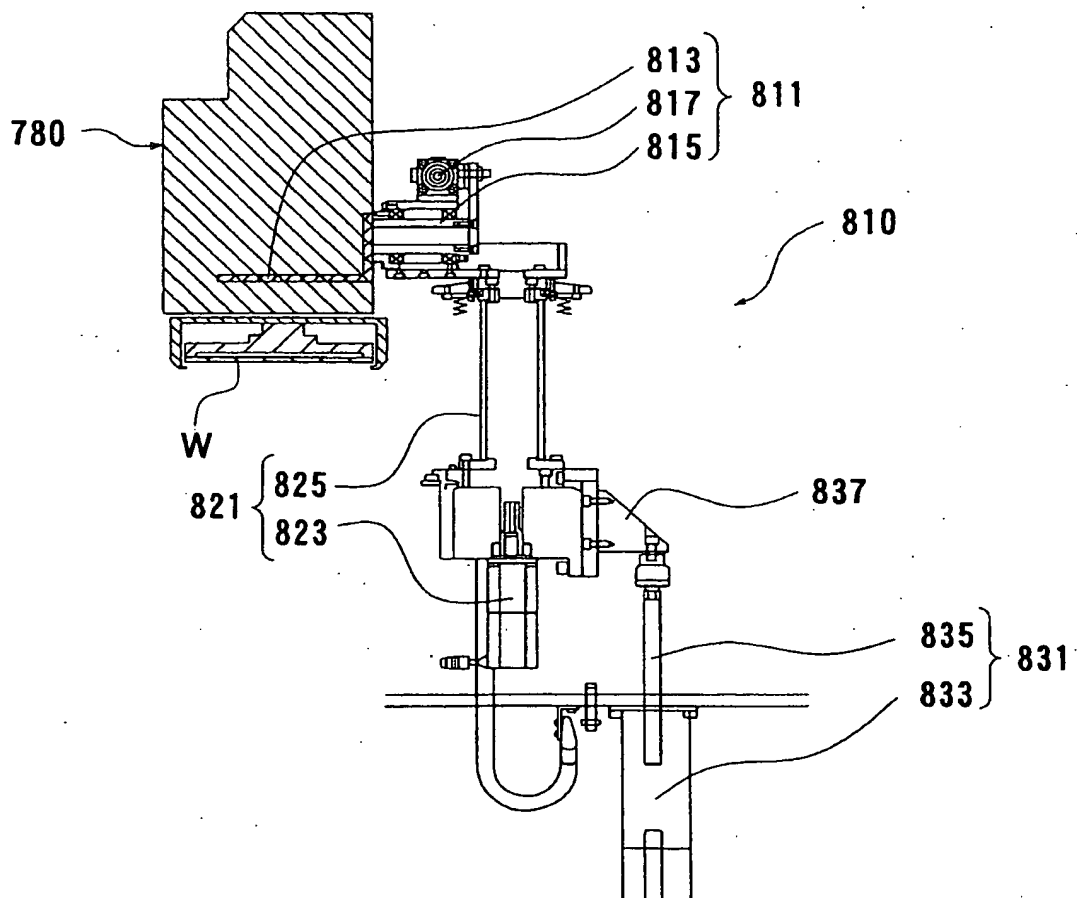
FIG. 20B





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FIG. 21



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FIG. 22B

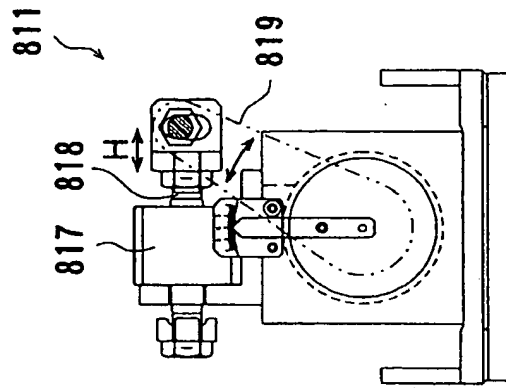
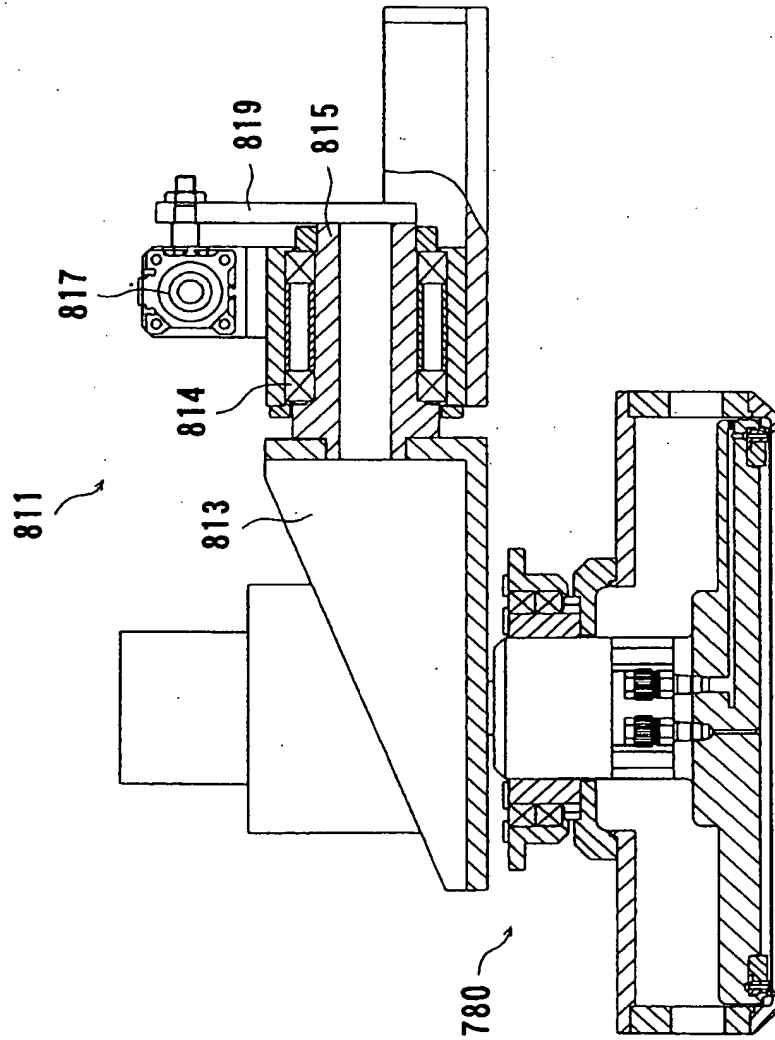
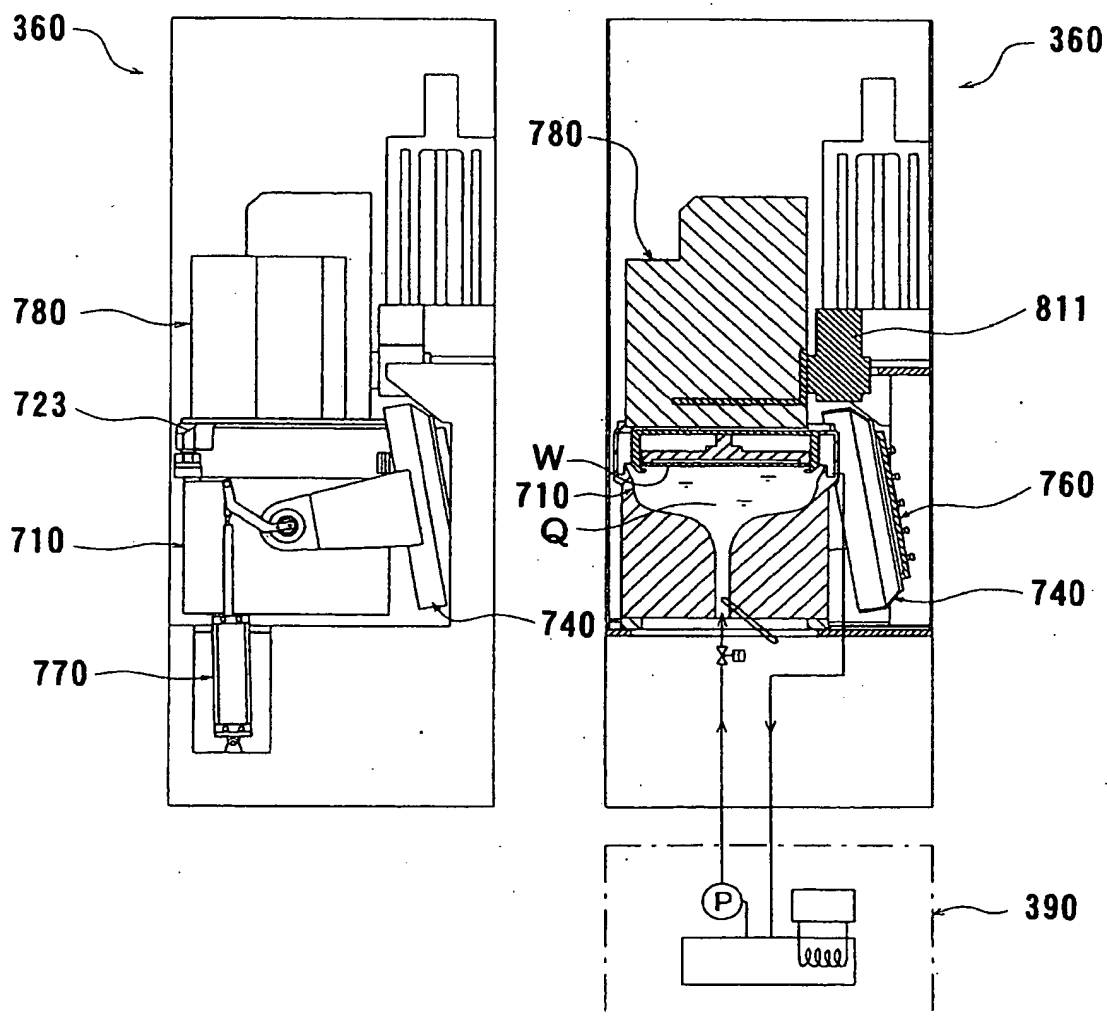


FIG. 22A



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FIG. 23A FIG. 23B



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FIG. 24A

FIG. 24B

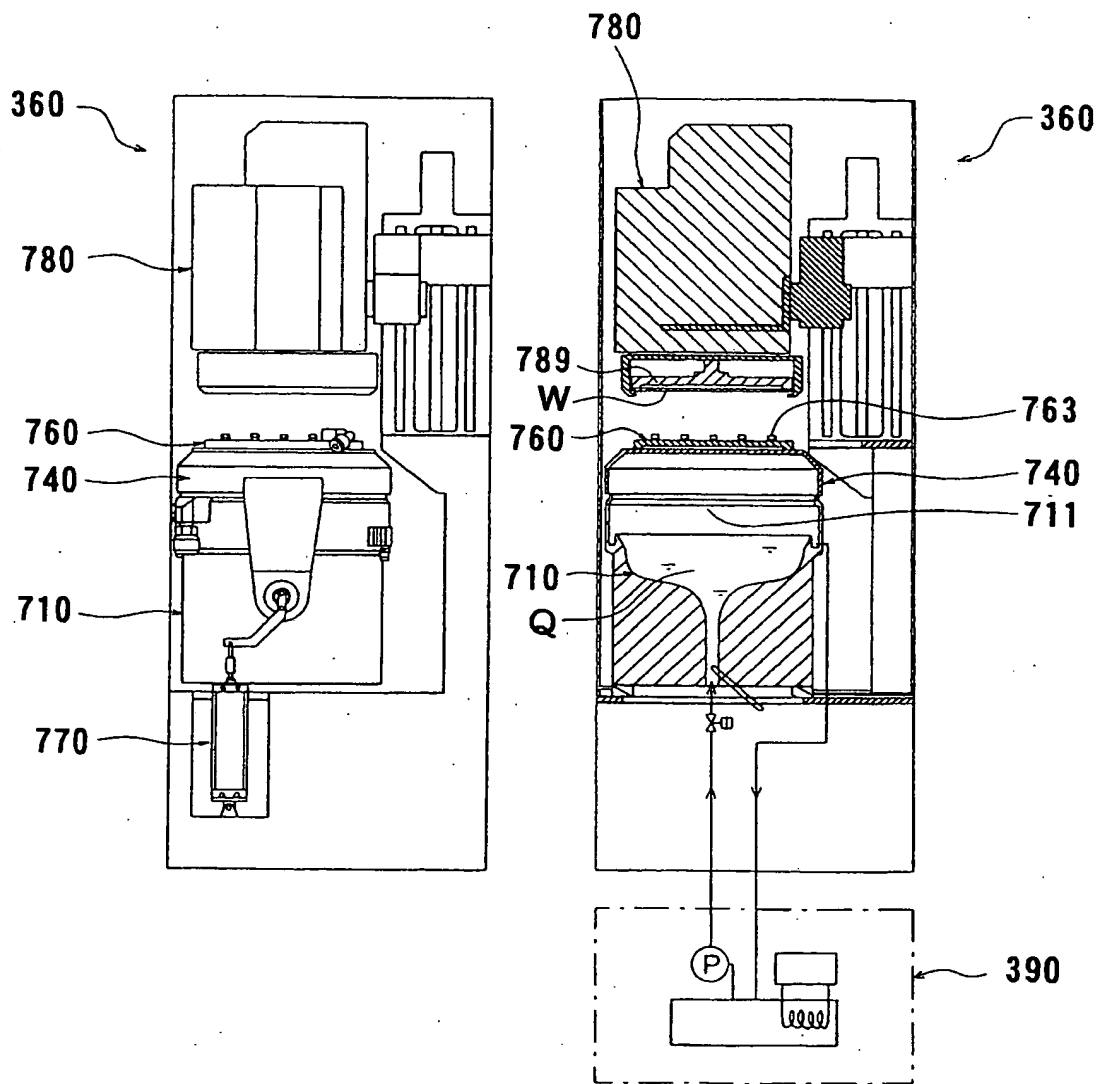
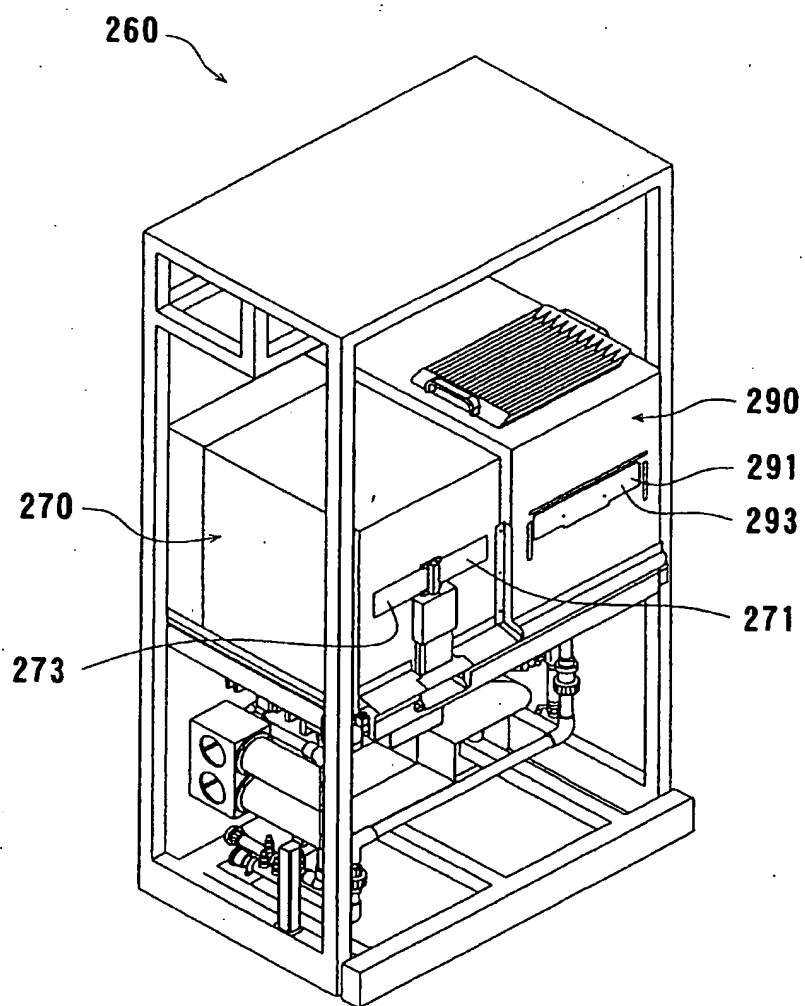


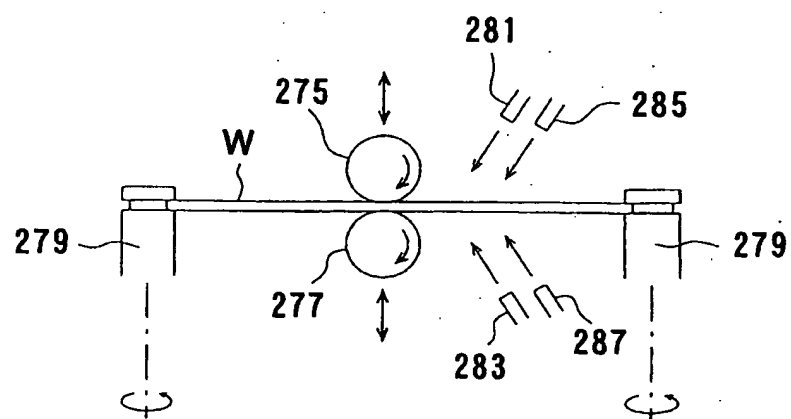
FIG. 25



REPLACEMENT SHEET

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FIG. 26



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FIG. 27

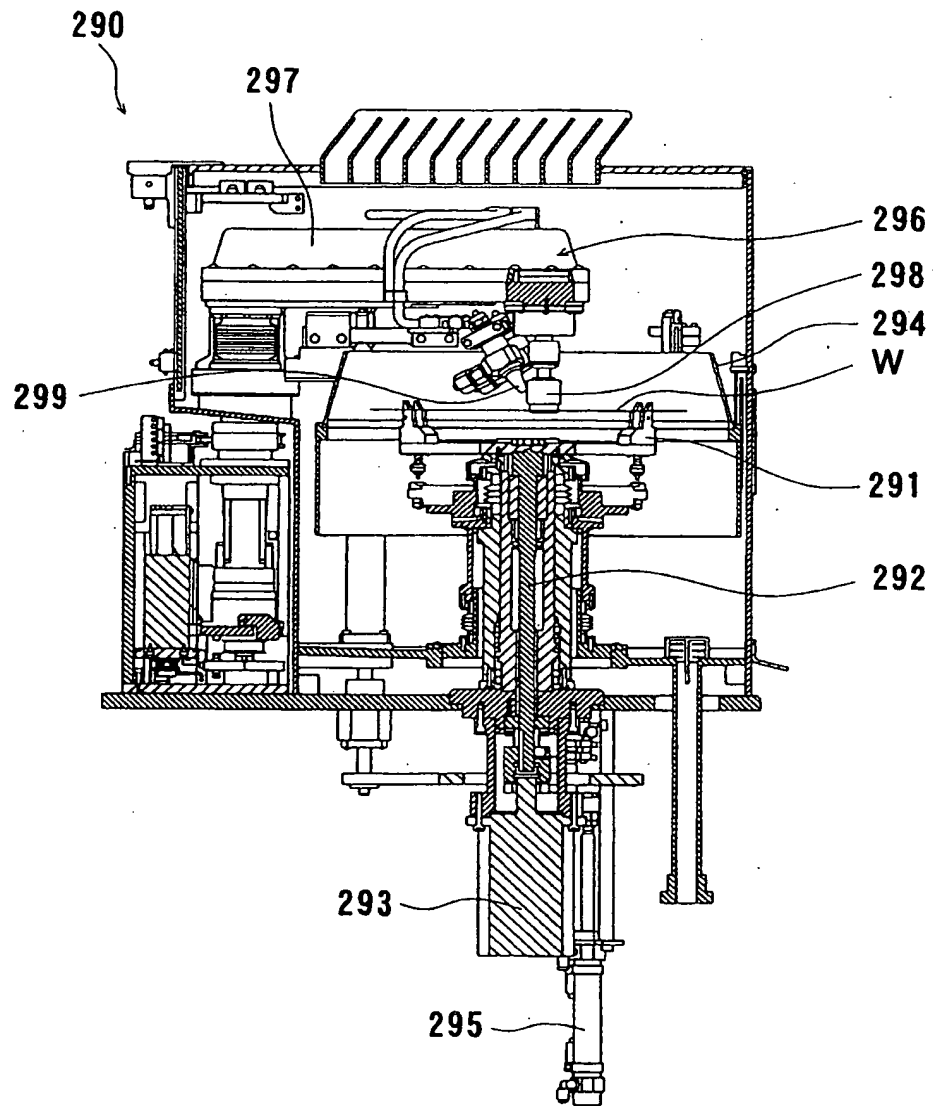
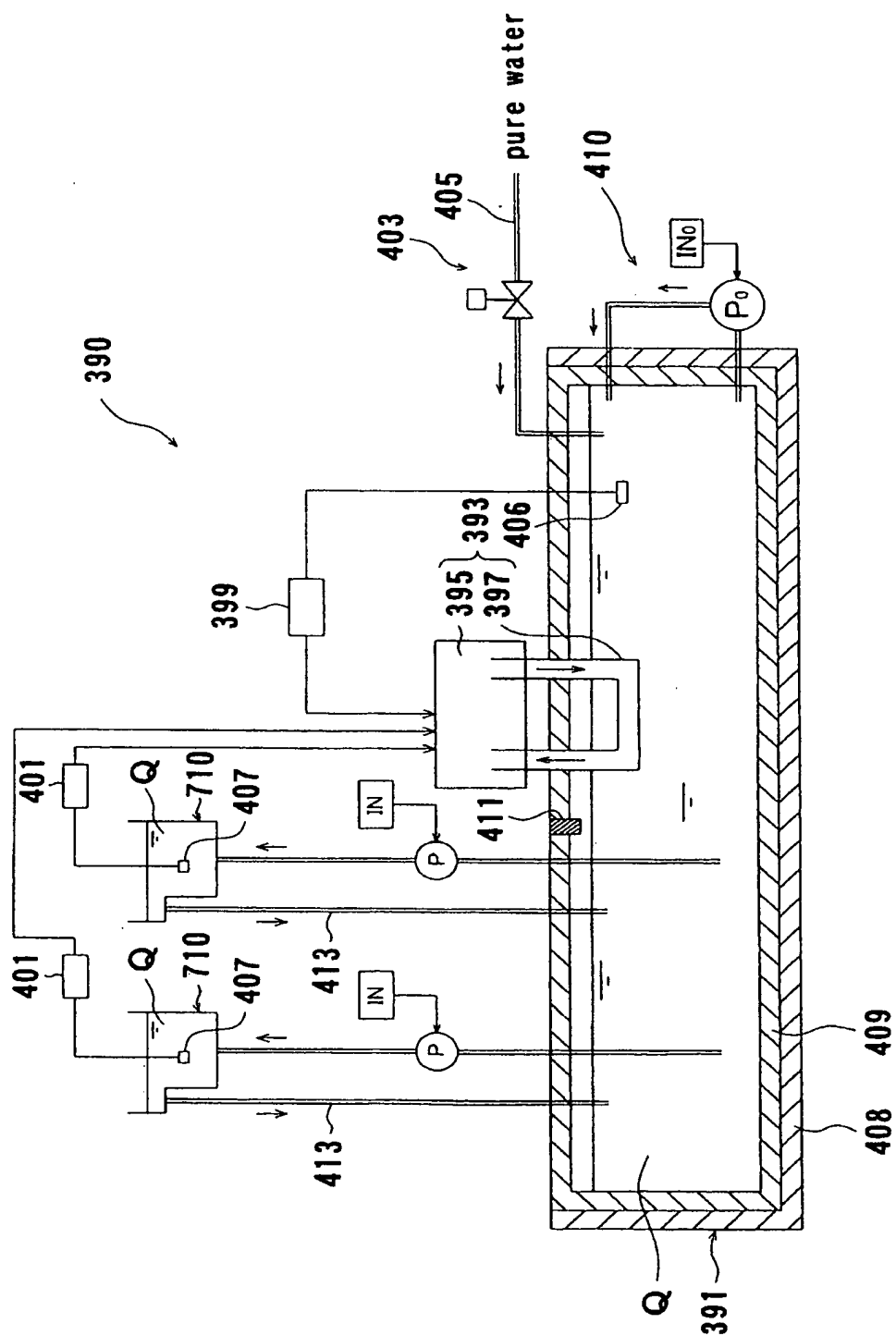


FIG. 28





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FIG. 29A

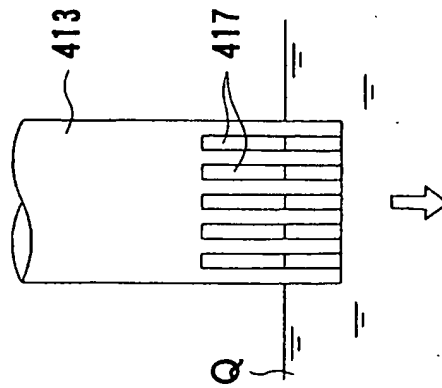


FIG. 29B

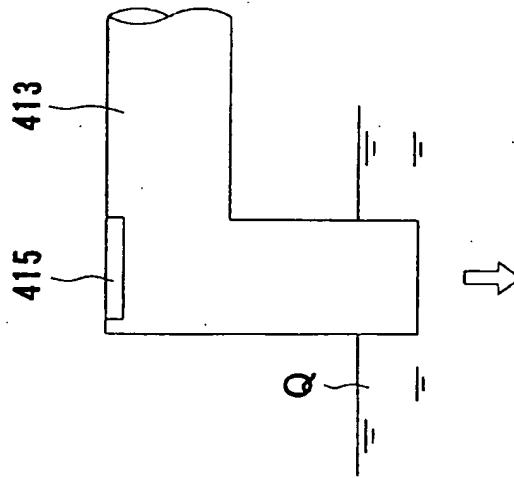
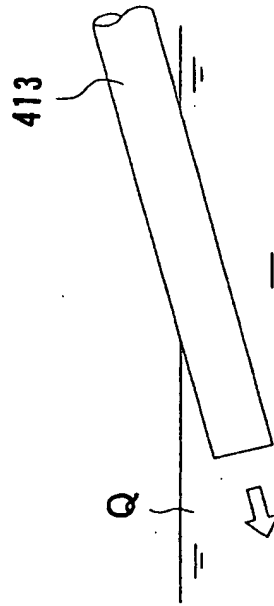


FIG. 29C



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FIG. 30B

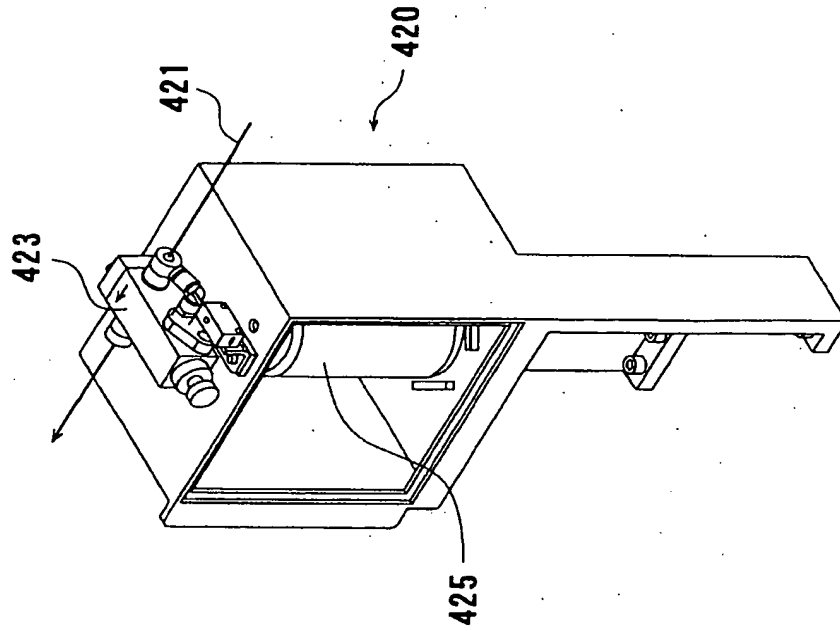
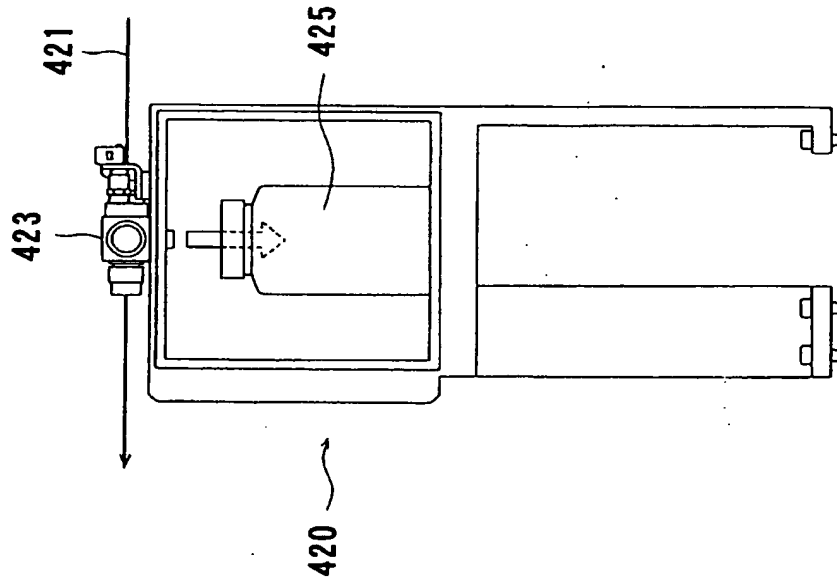
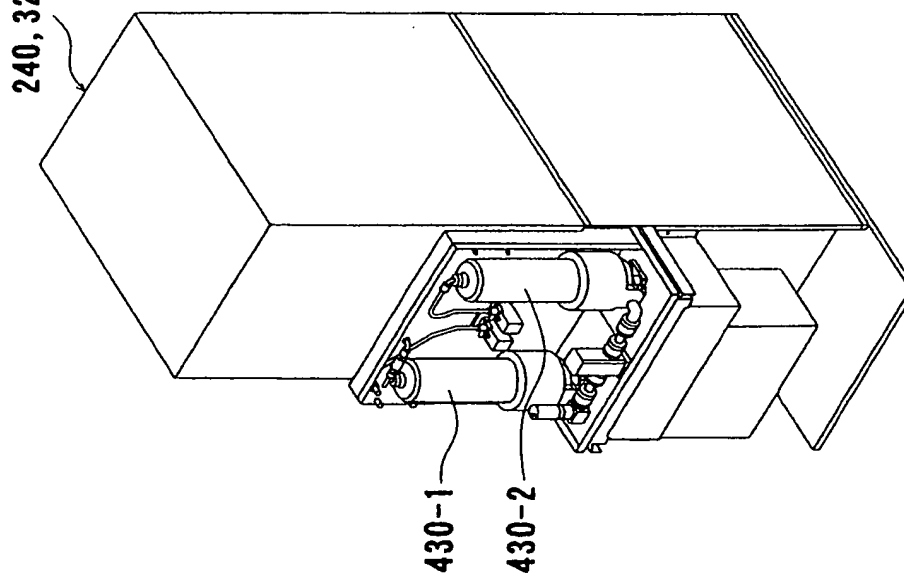


FIG. 30A



**FIG. 31A**



**FIG. 31B**

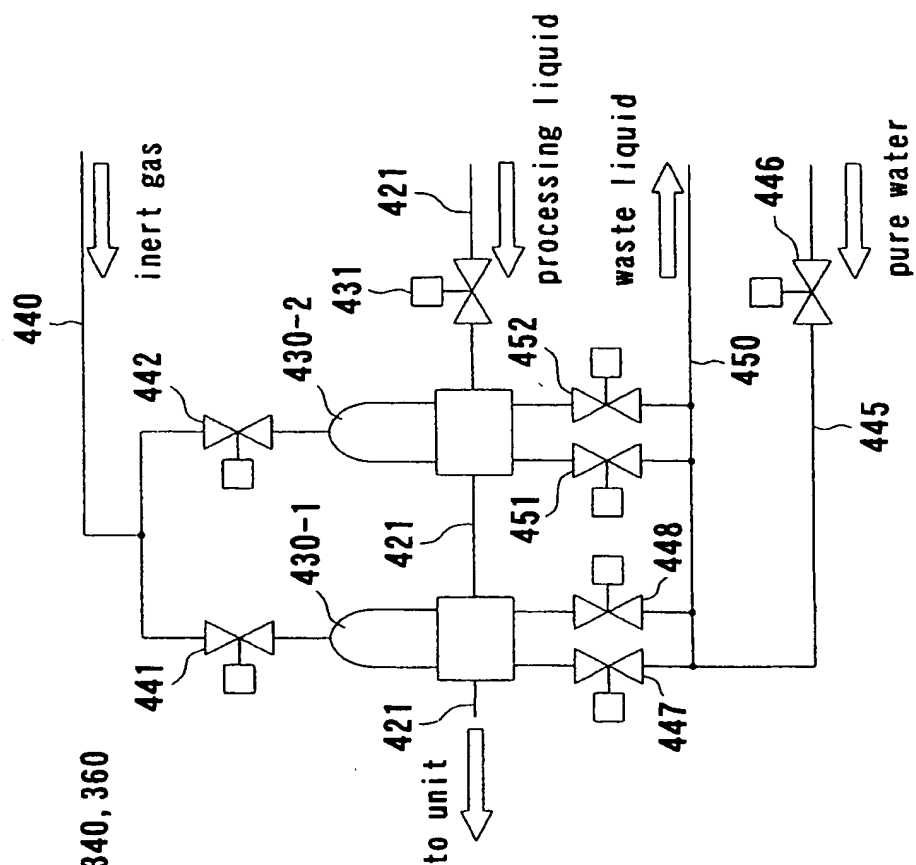
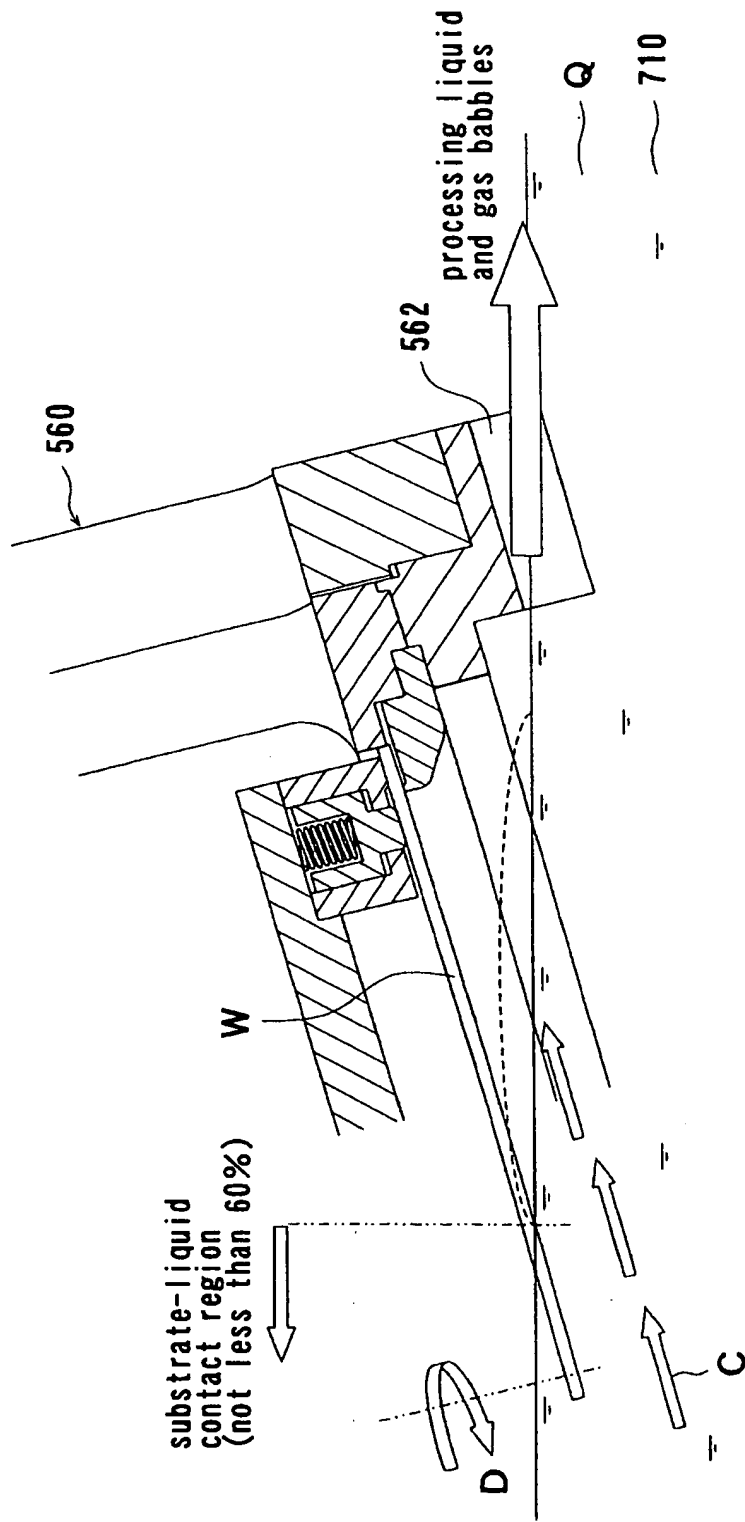
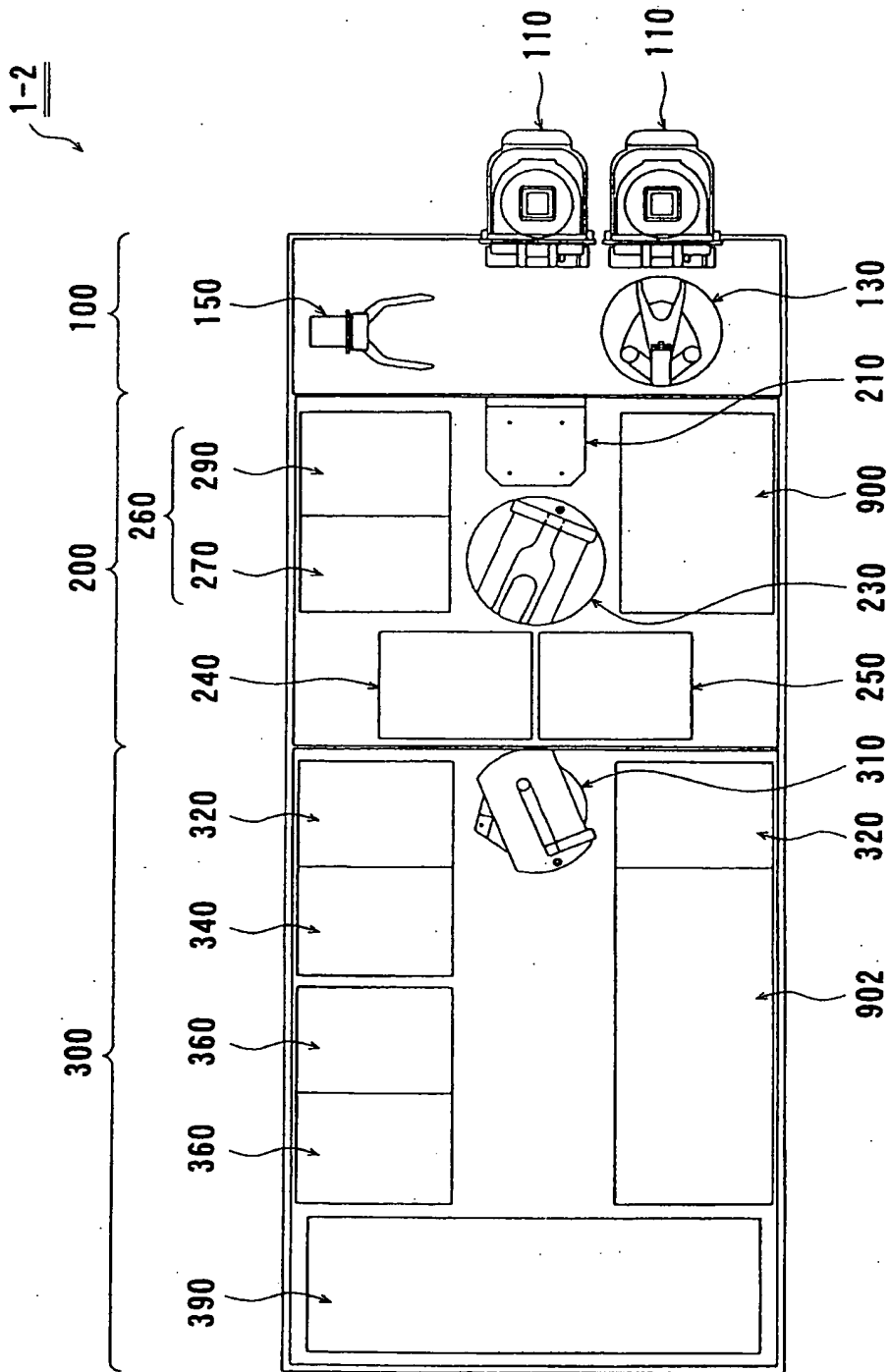


FIG. 32



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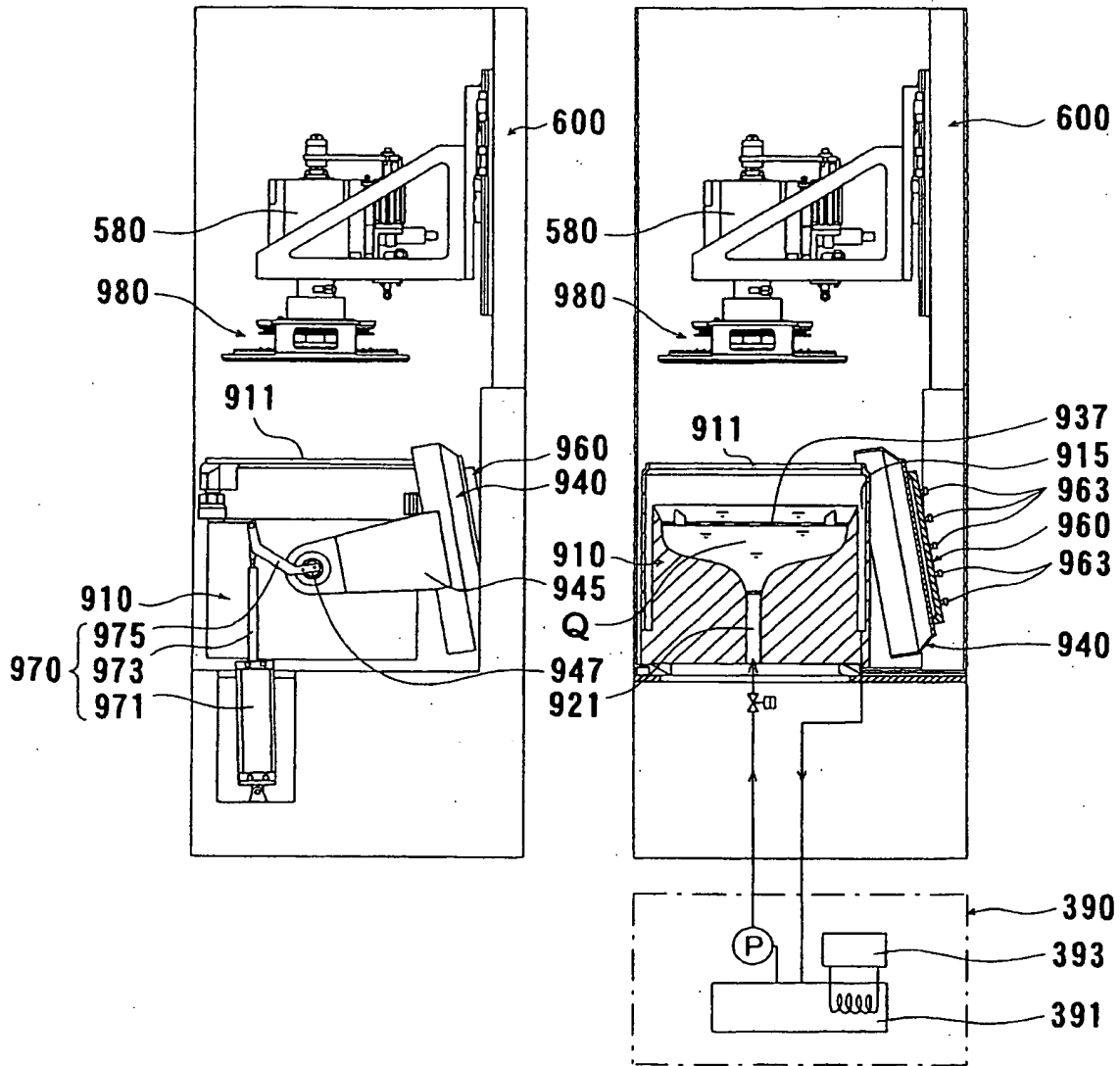
FIG. 33



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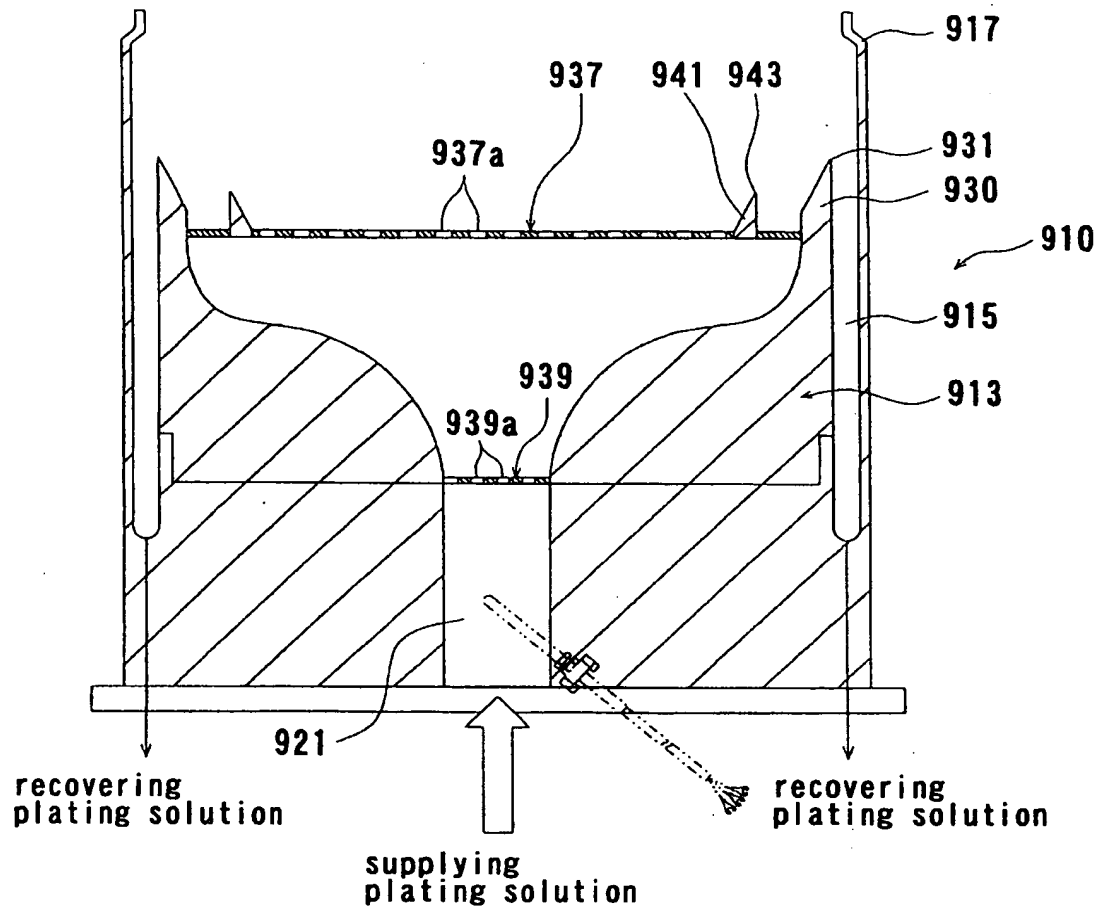
FIG. 34A

FIG. 34B

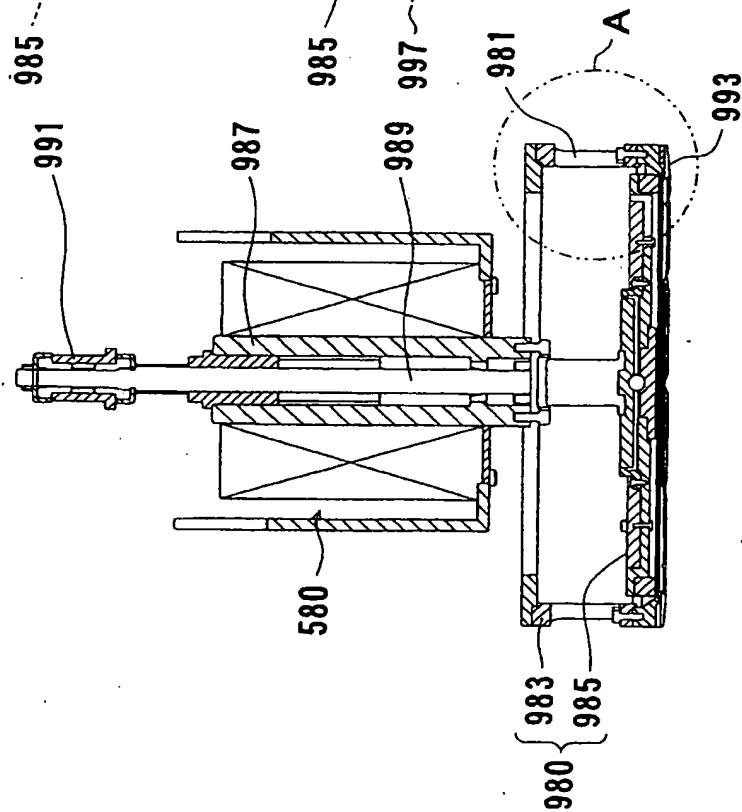


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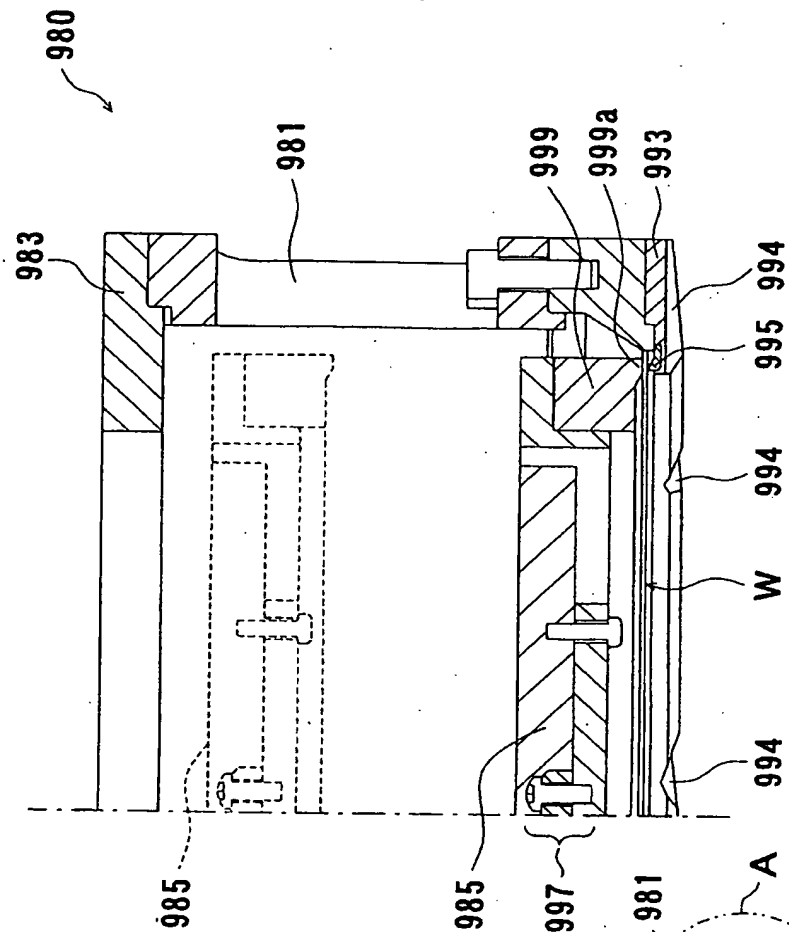
FIG. 35



**FIG. 36A**



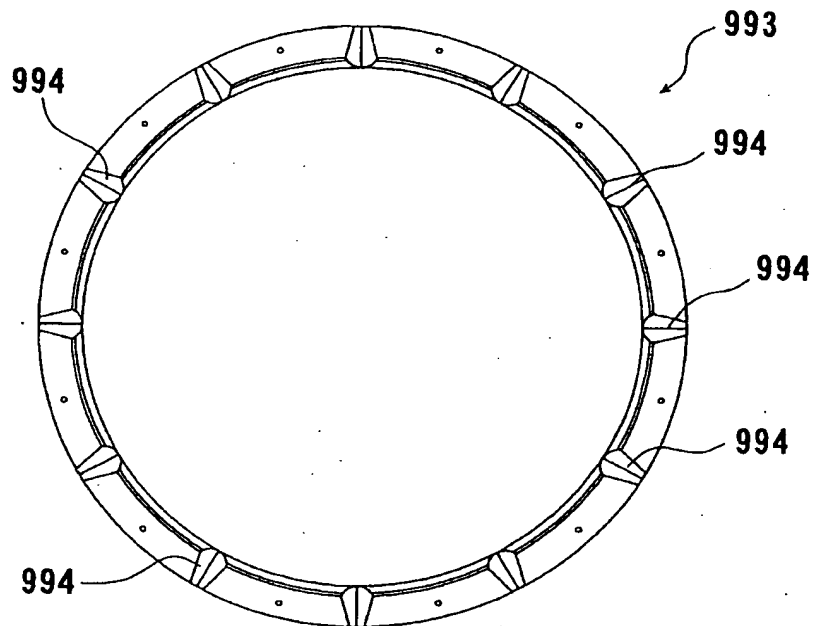
**FIG. 36B**



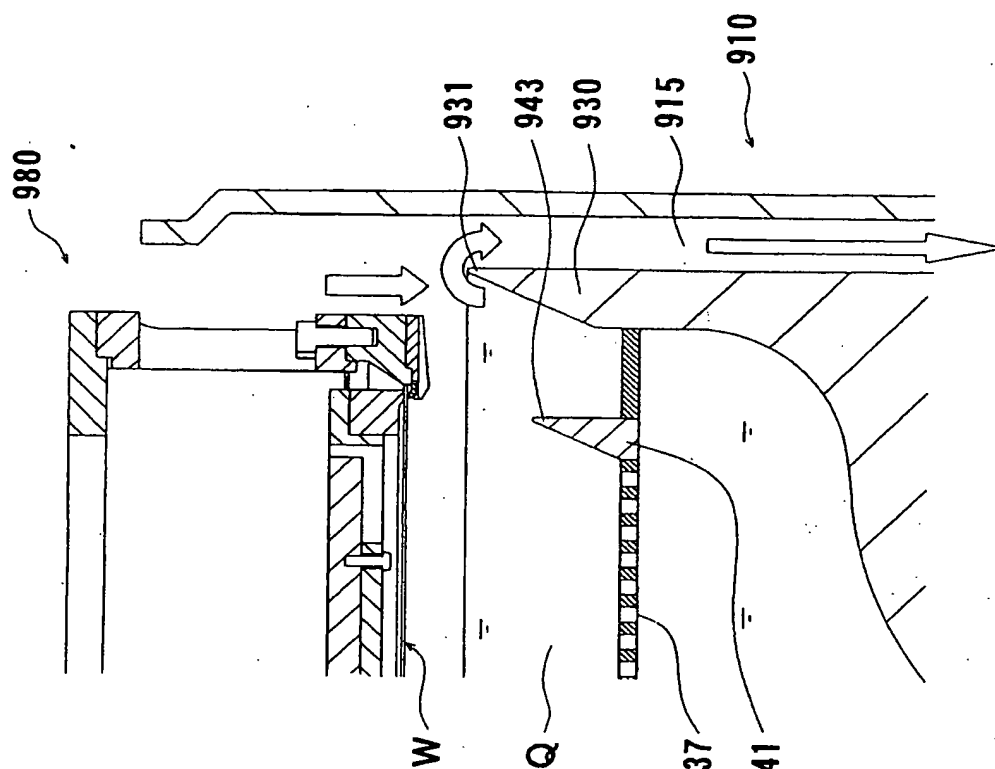


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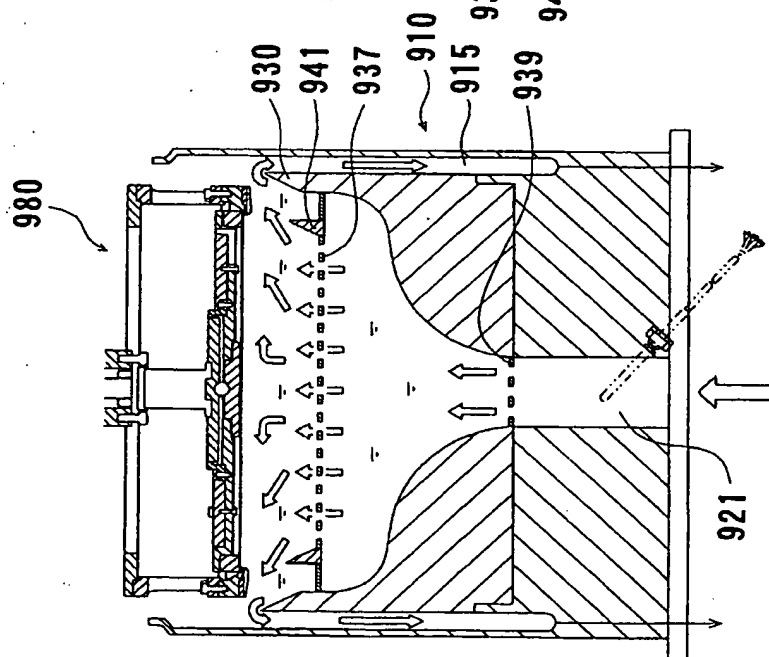
FIG. 37



**F / G. 38 B**



**FIG. 38A**



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FIG. 39B

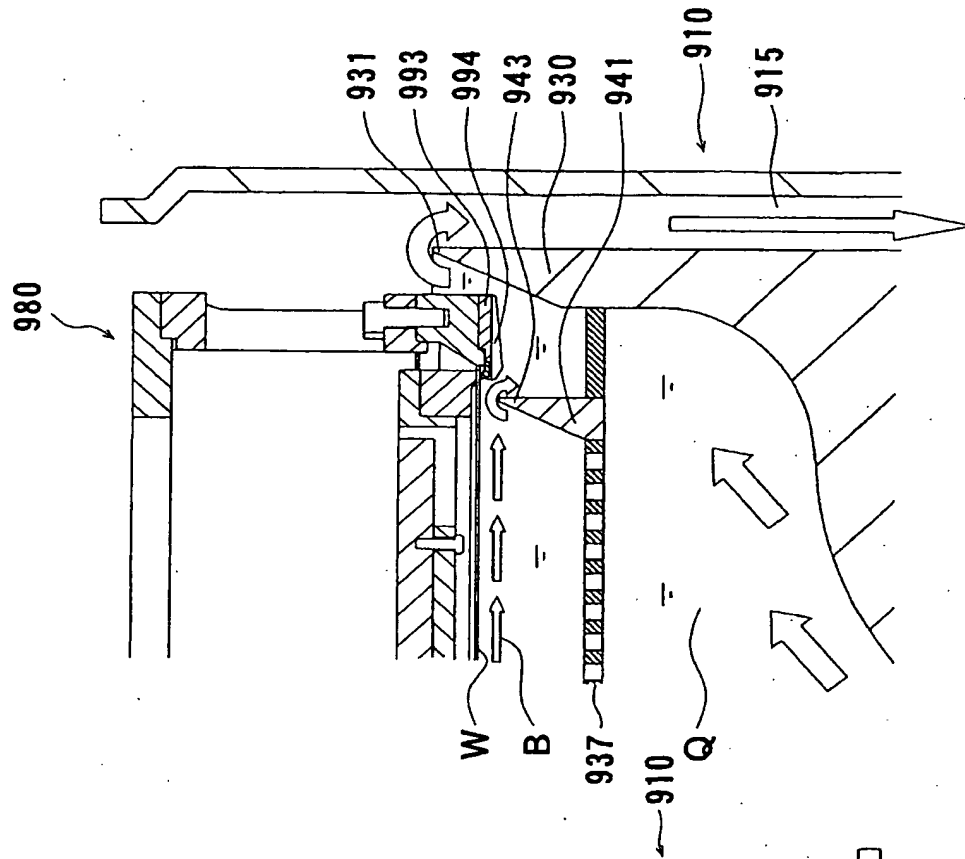
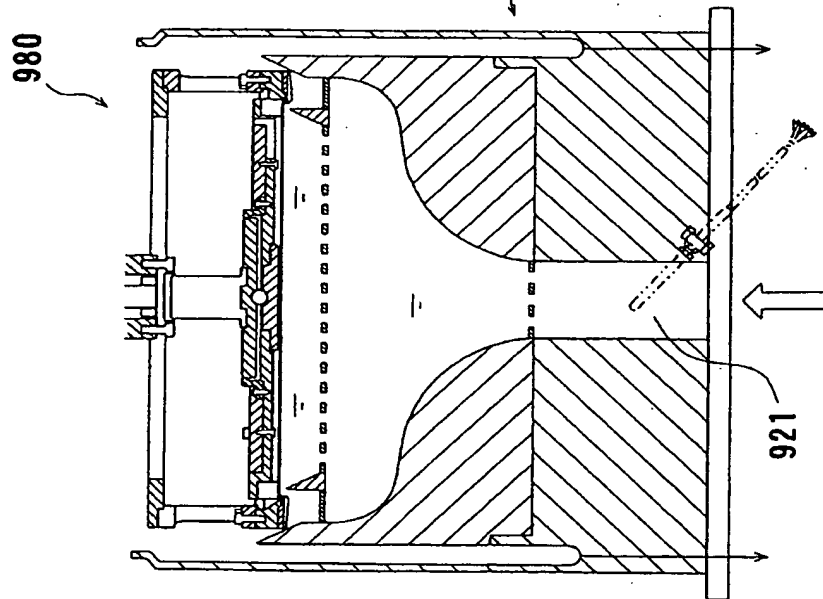


FIG. 39A



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FIG. 40B

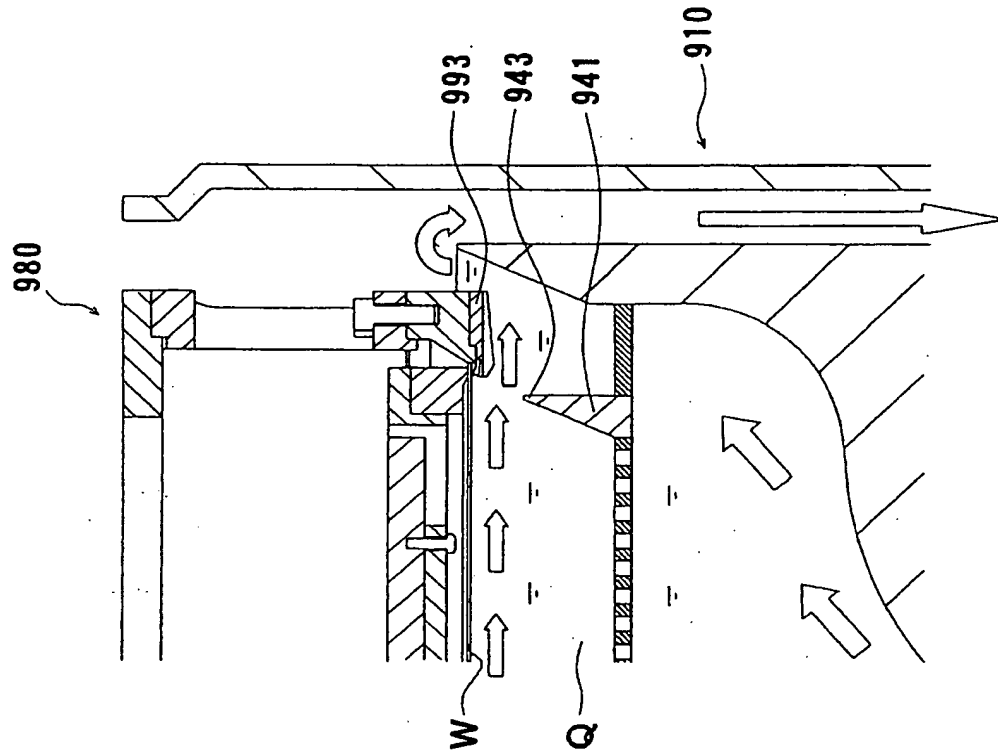
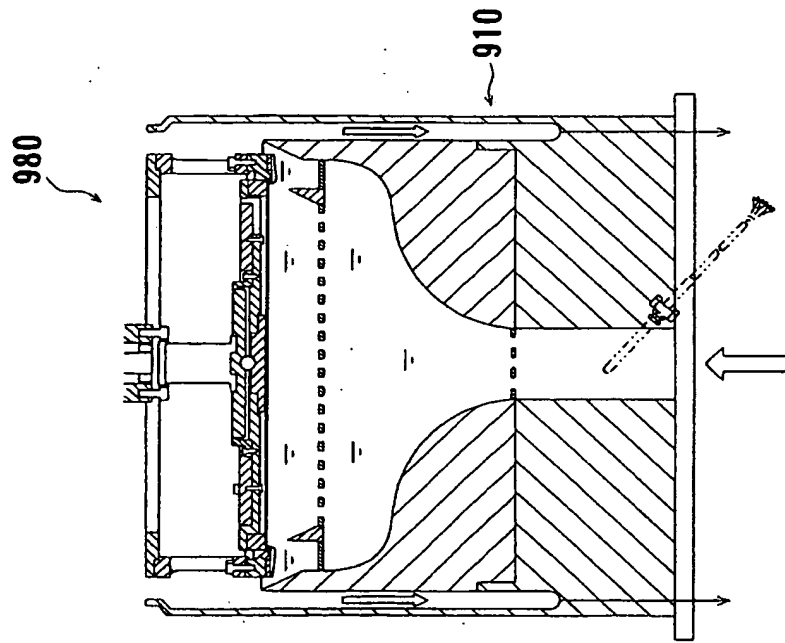


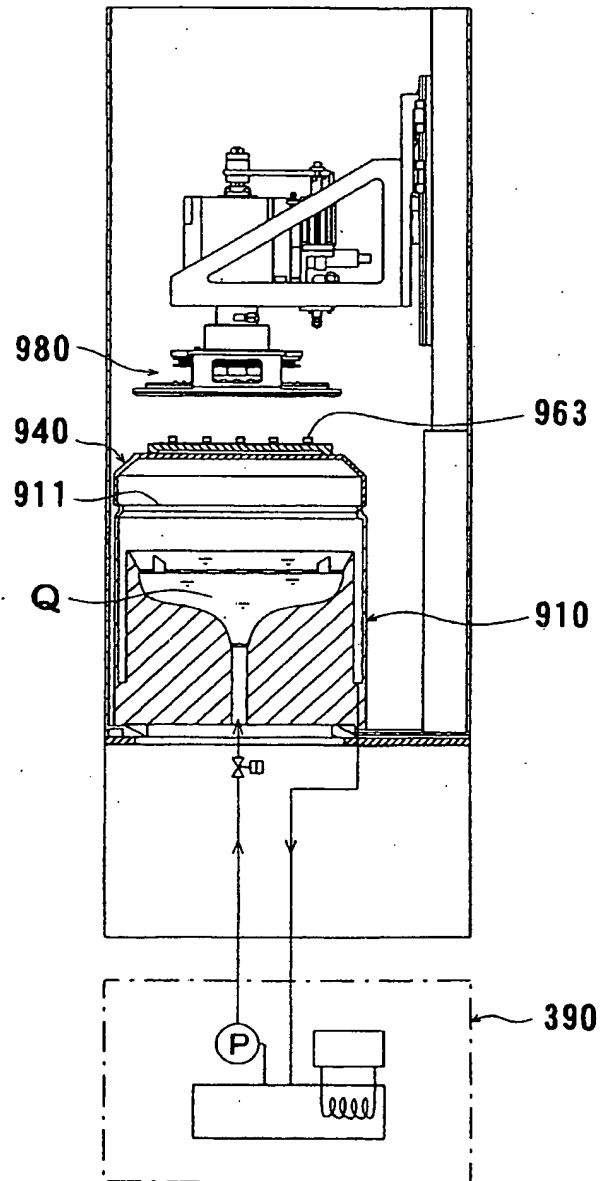
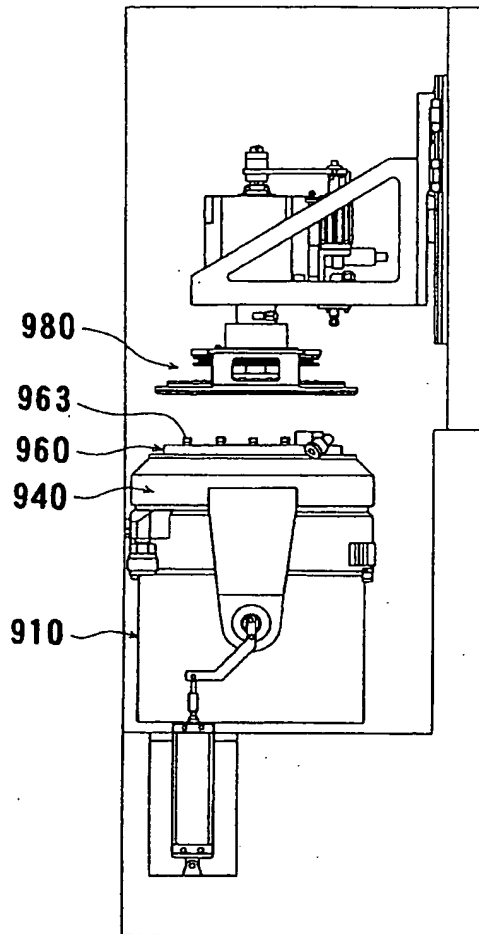
FIG. 40A



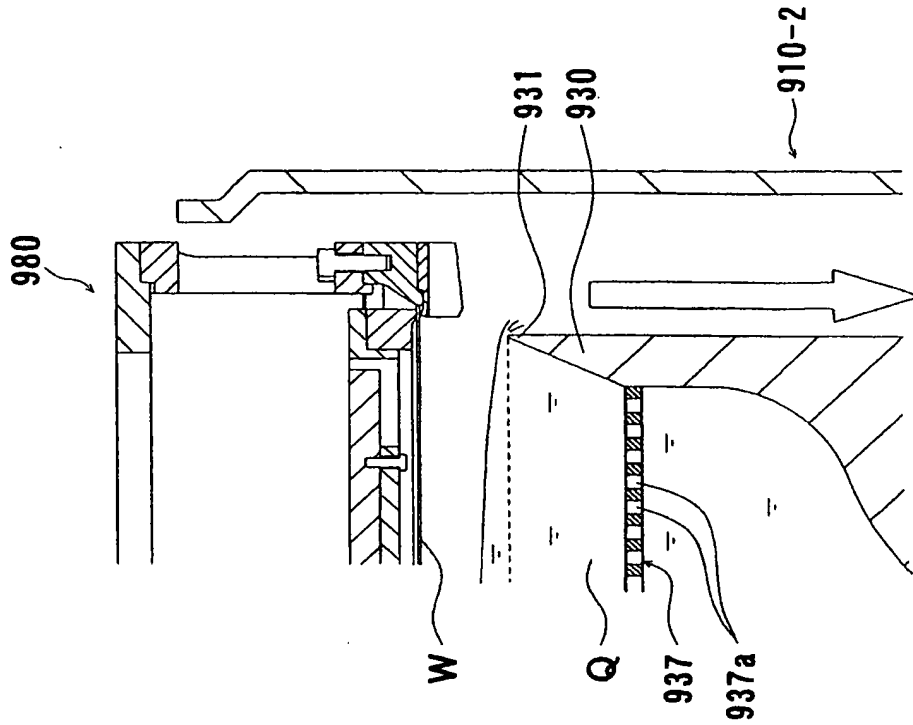
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FIG. 41A

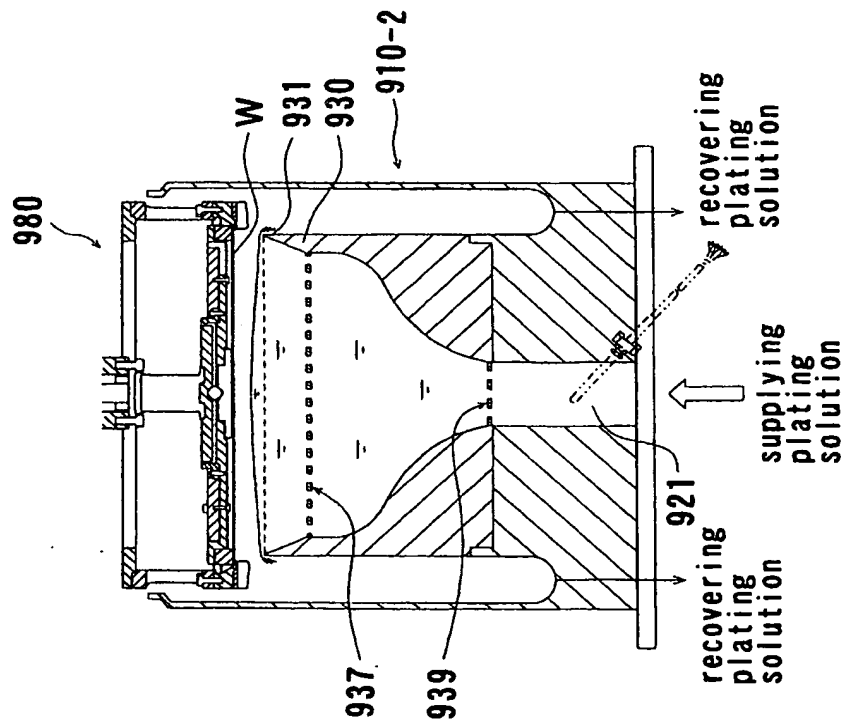
FIG. 41B



**FIG. 42B**



**FIG. 42A**



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FIG. 43B

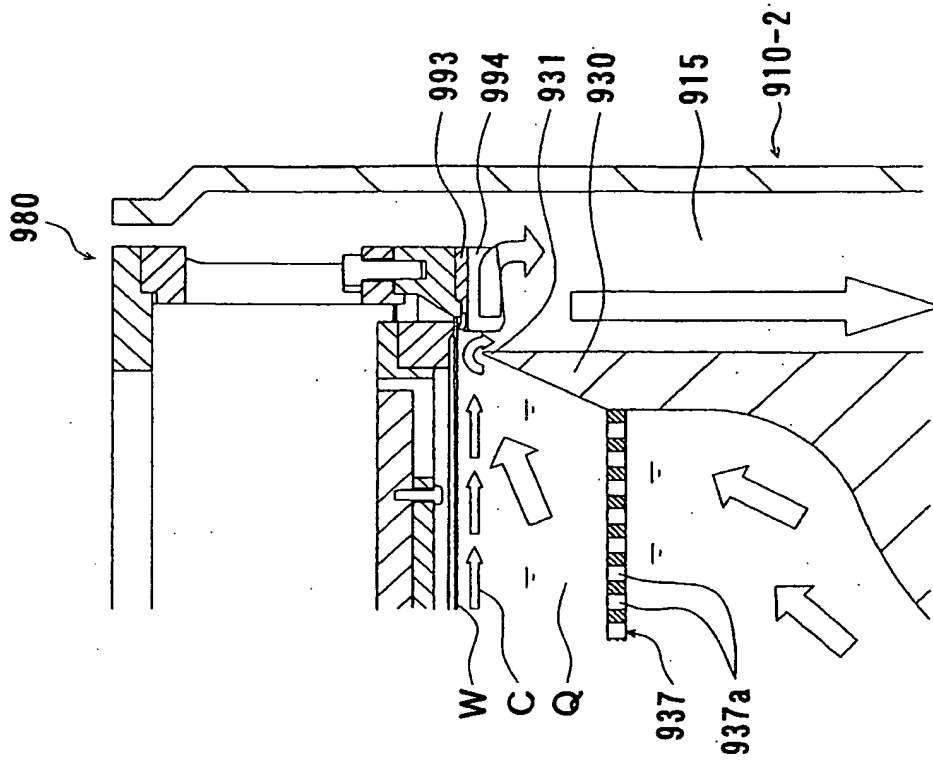


FIG. 43A

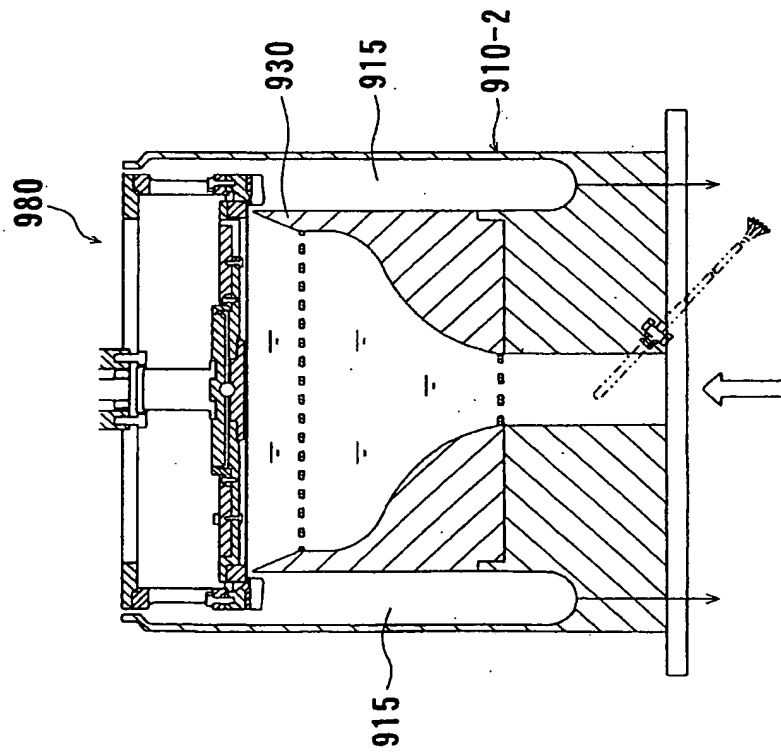


FIG. 44A

FIG. 44B

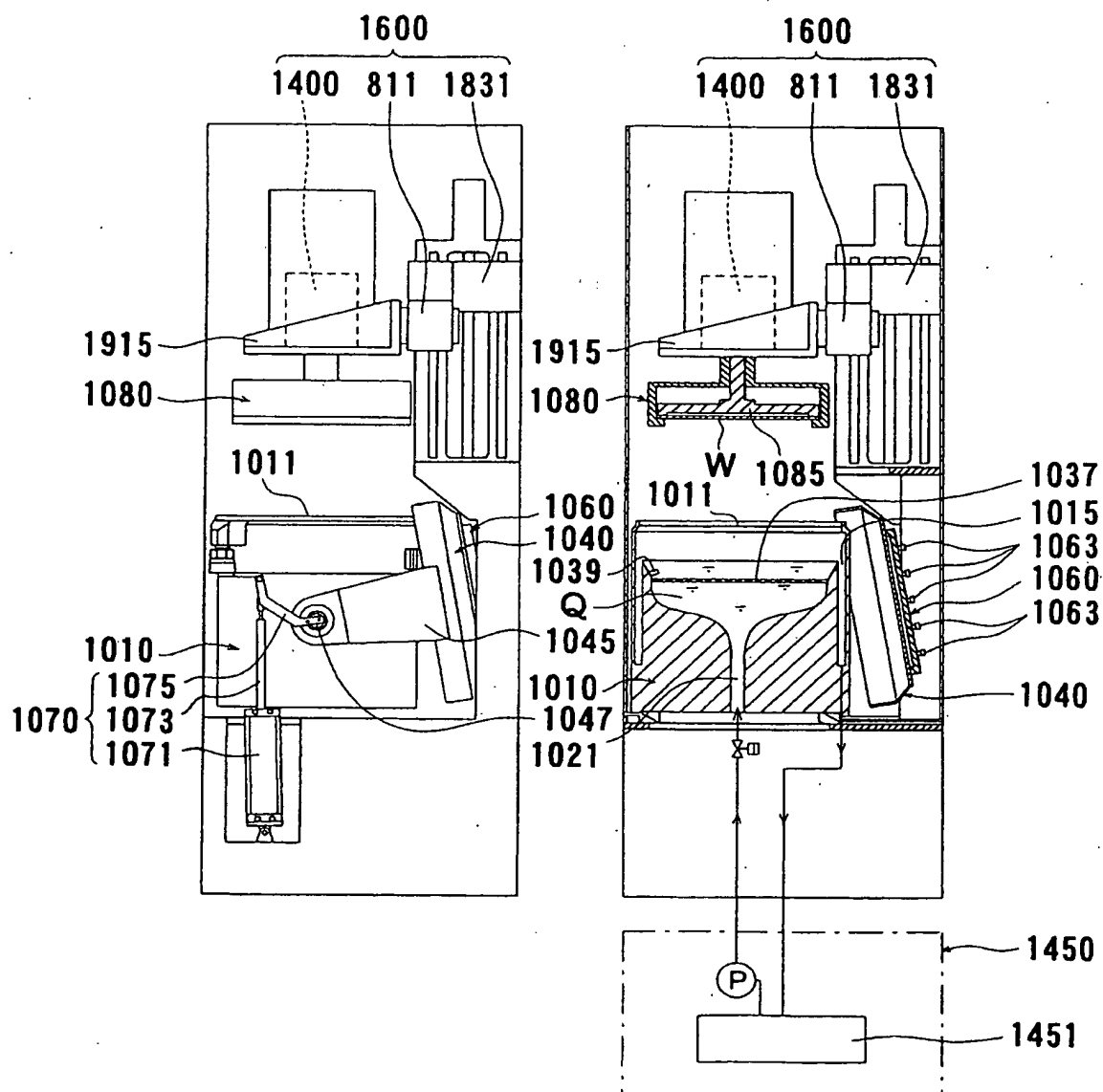
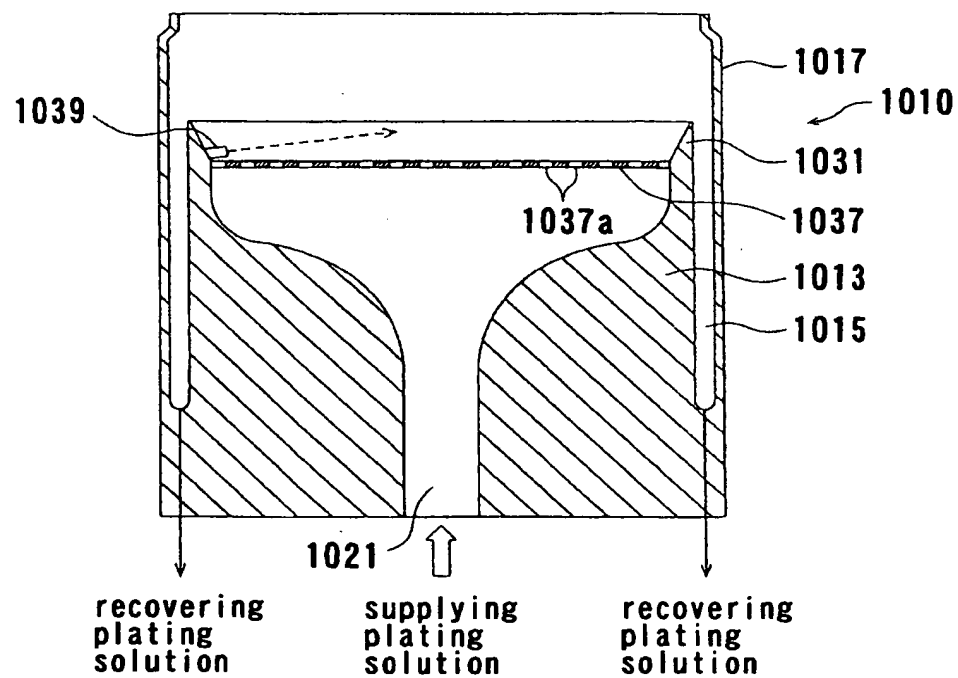




FIG. 45



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FIG. 46B

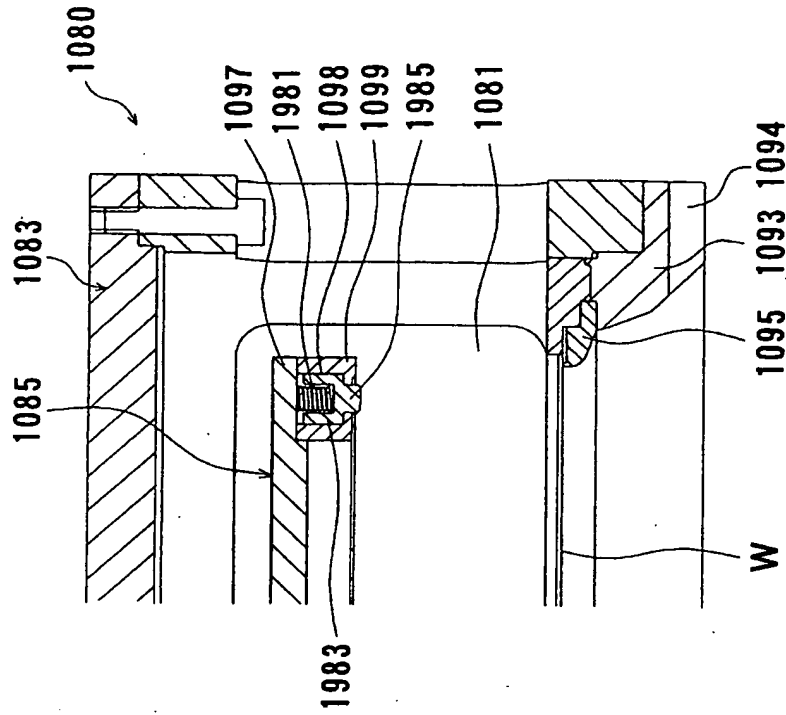


FIG. 46A

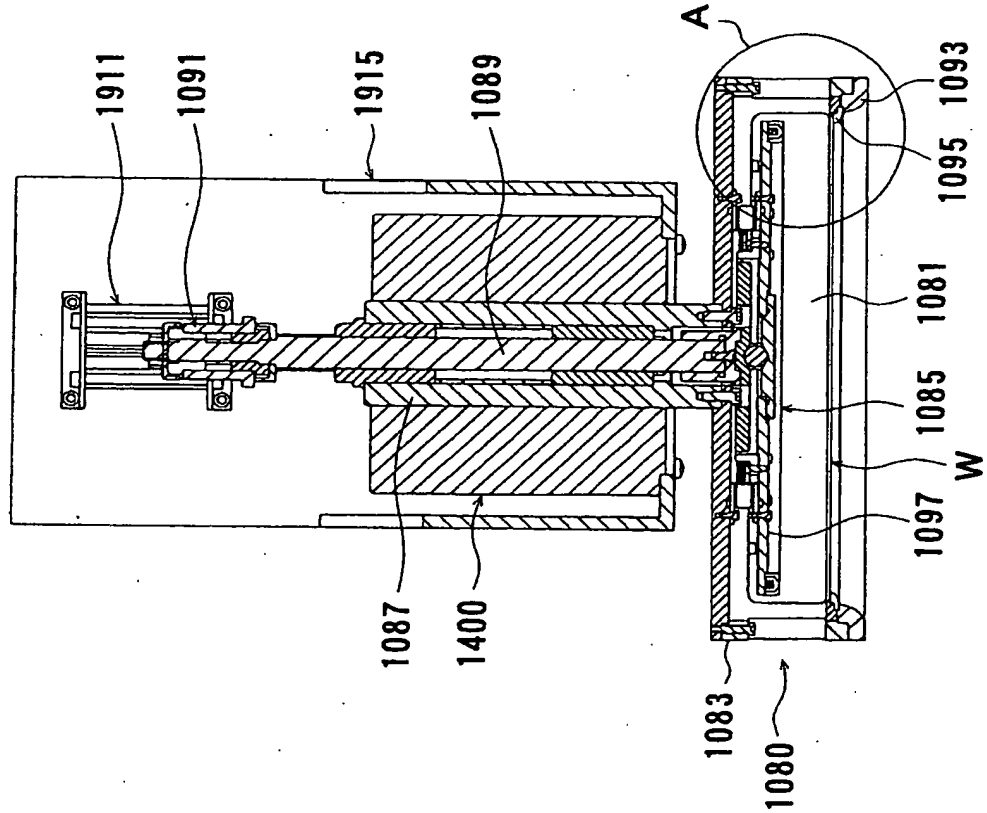


FIG. 47

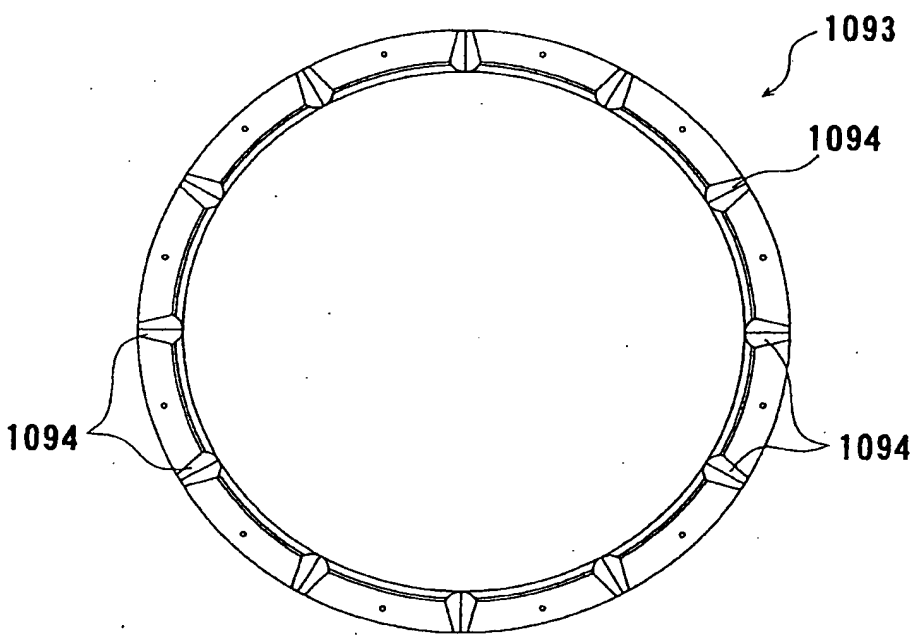
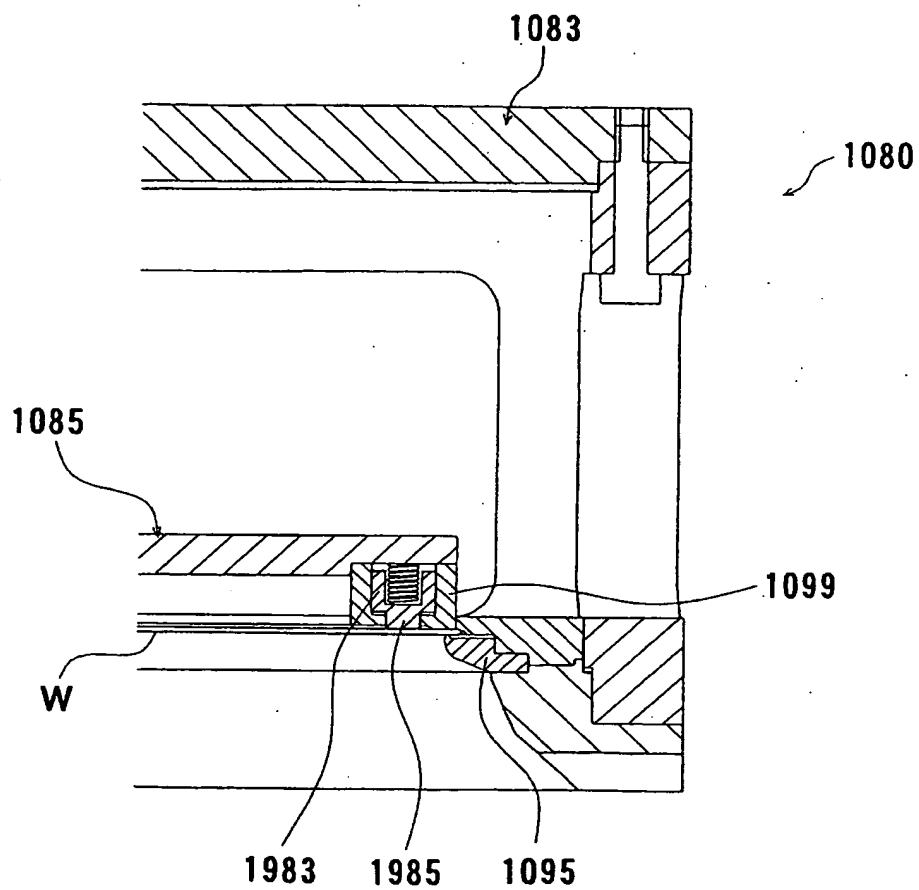
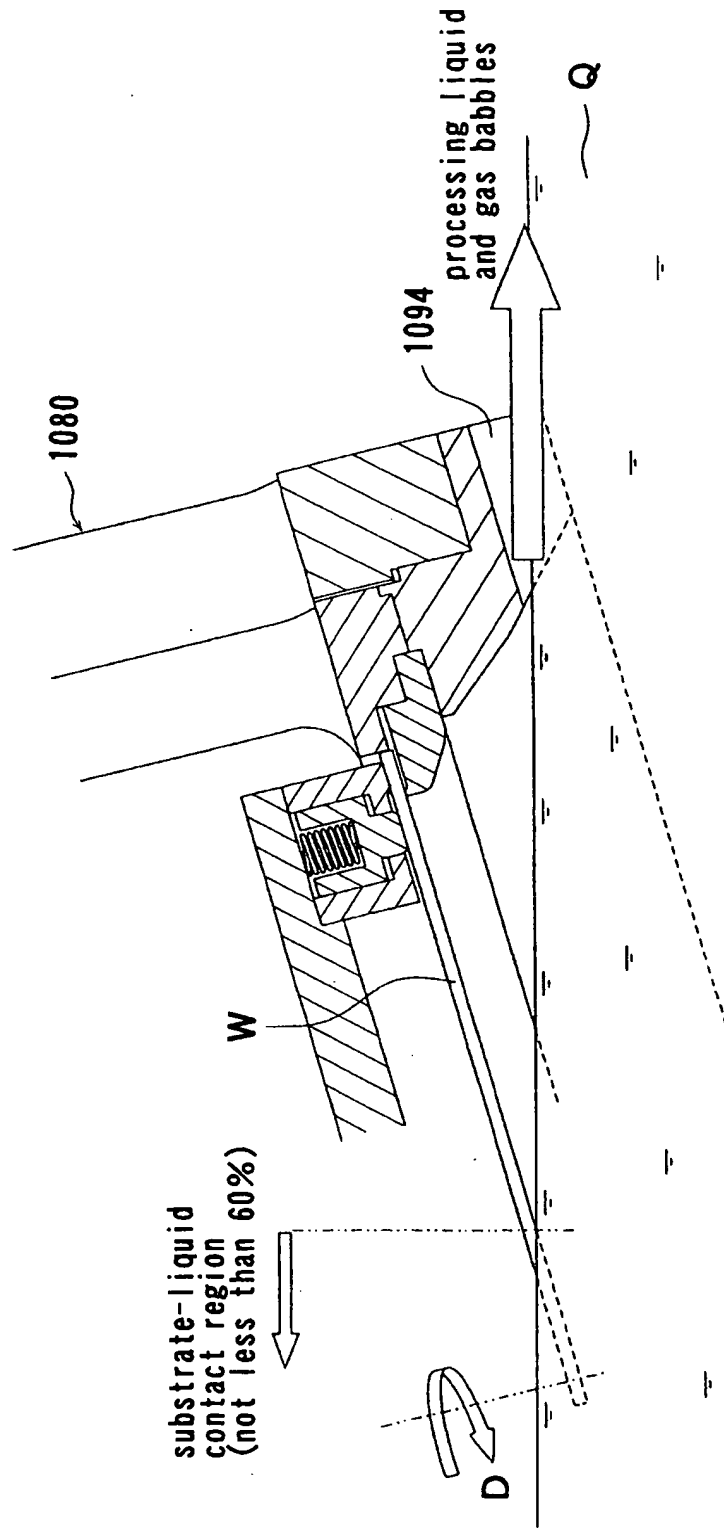


FIG. 48



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FIG. 49



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FIG. 50

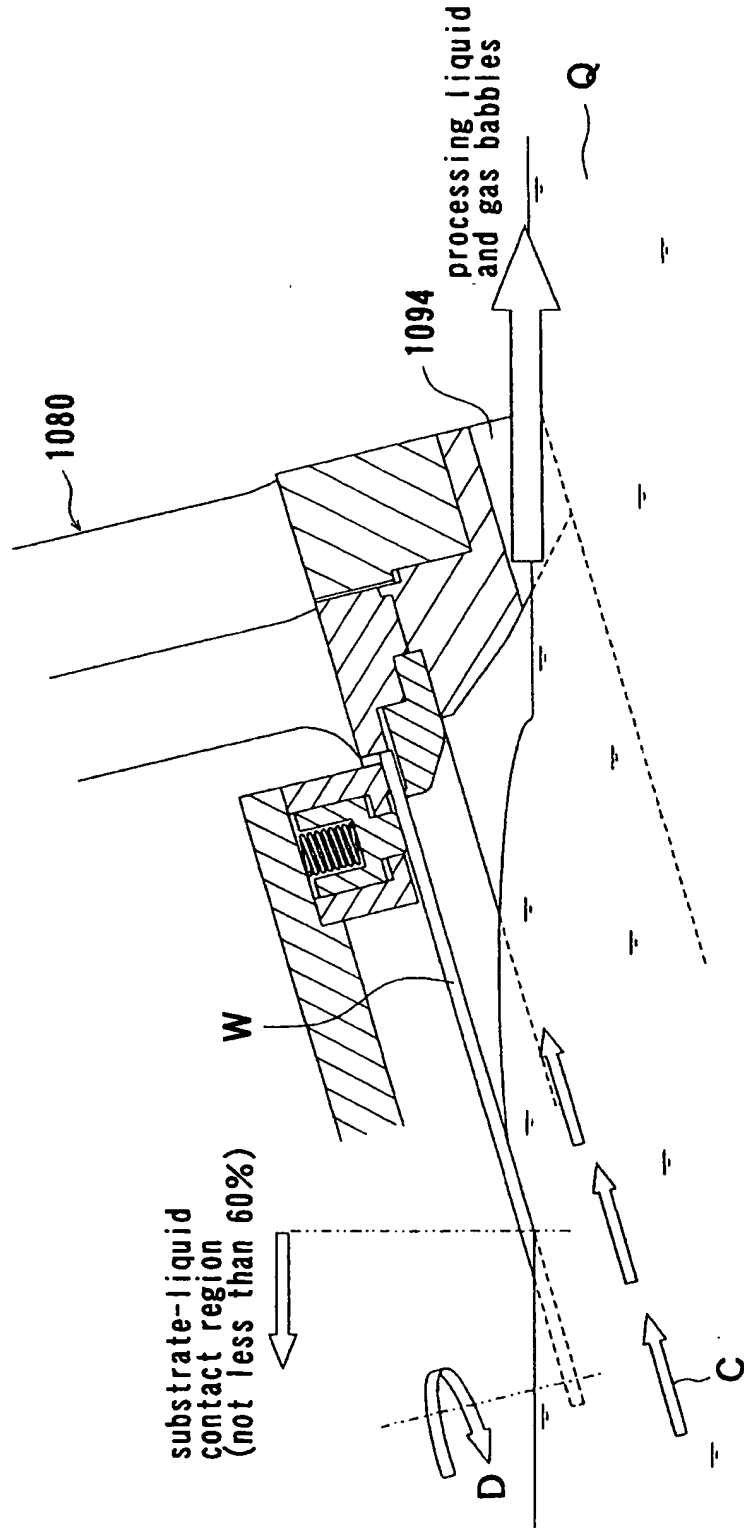
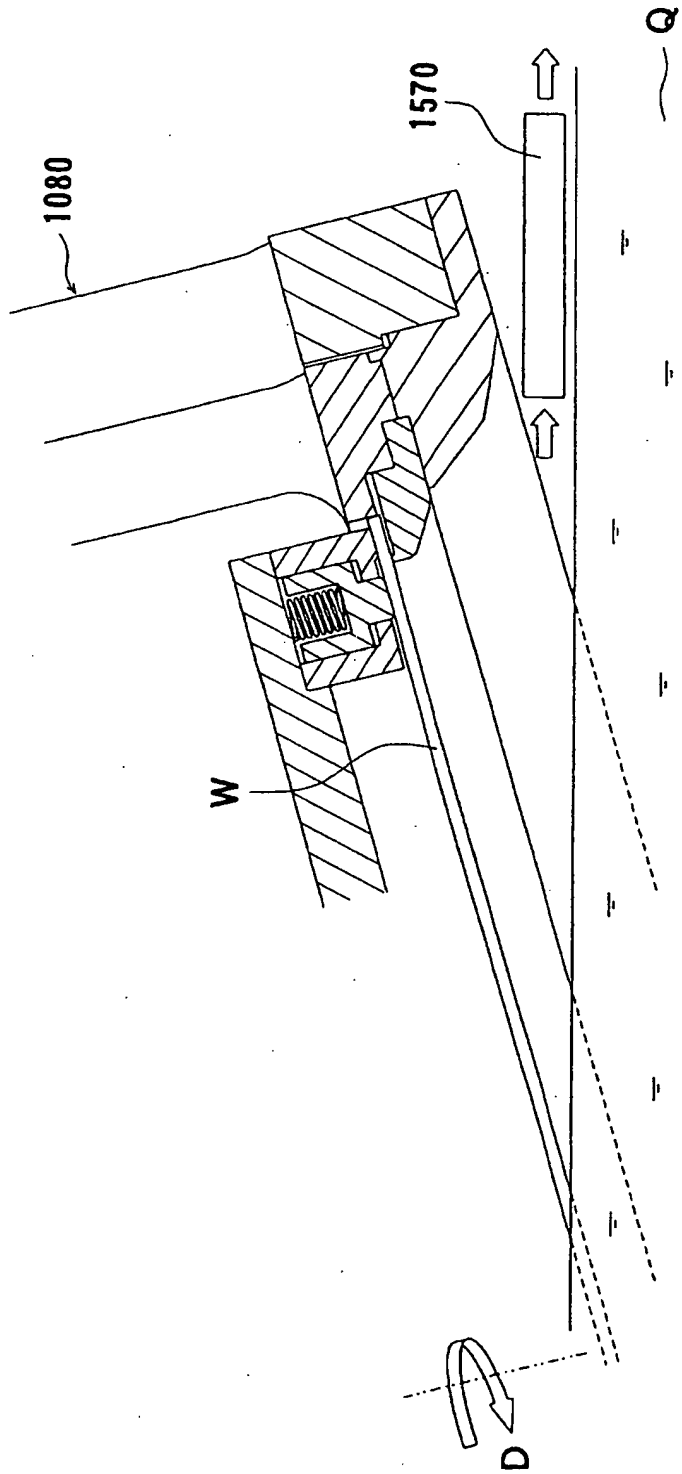


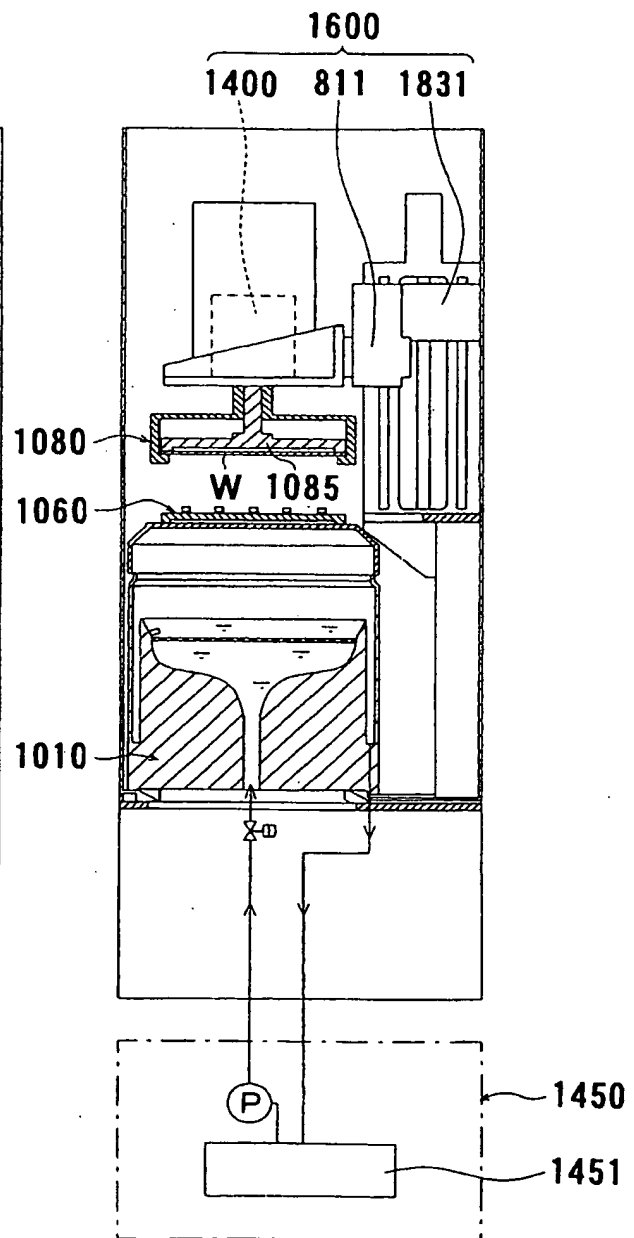
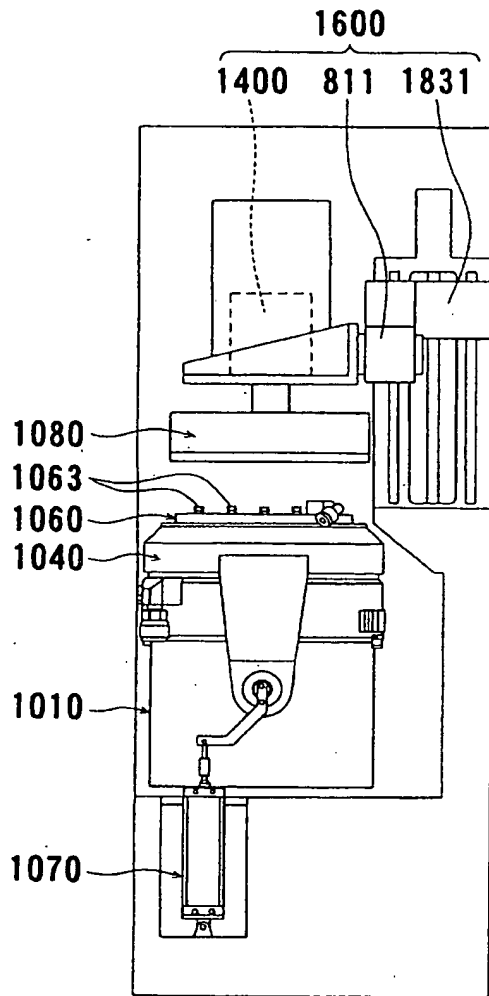
FIG. 51



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FIG. 52A

FIG. 52B





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FIG. 53A

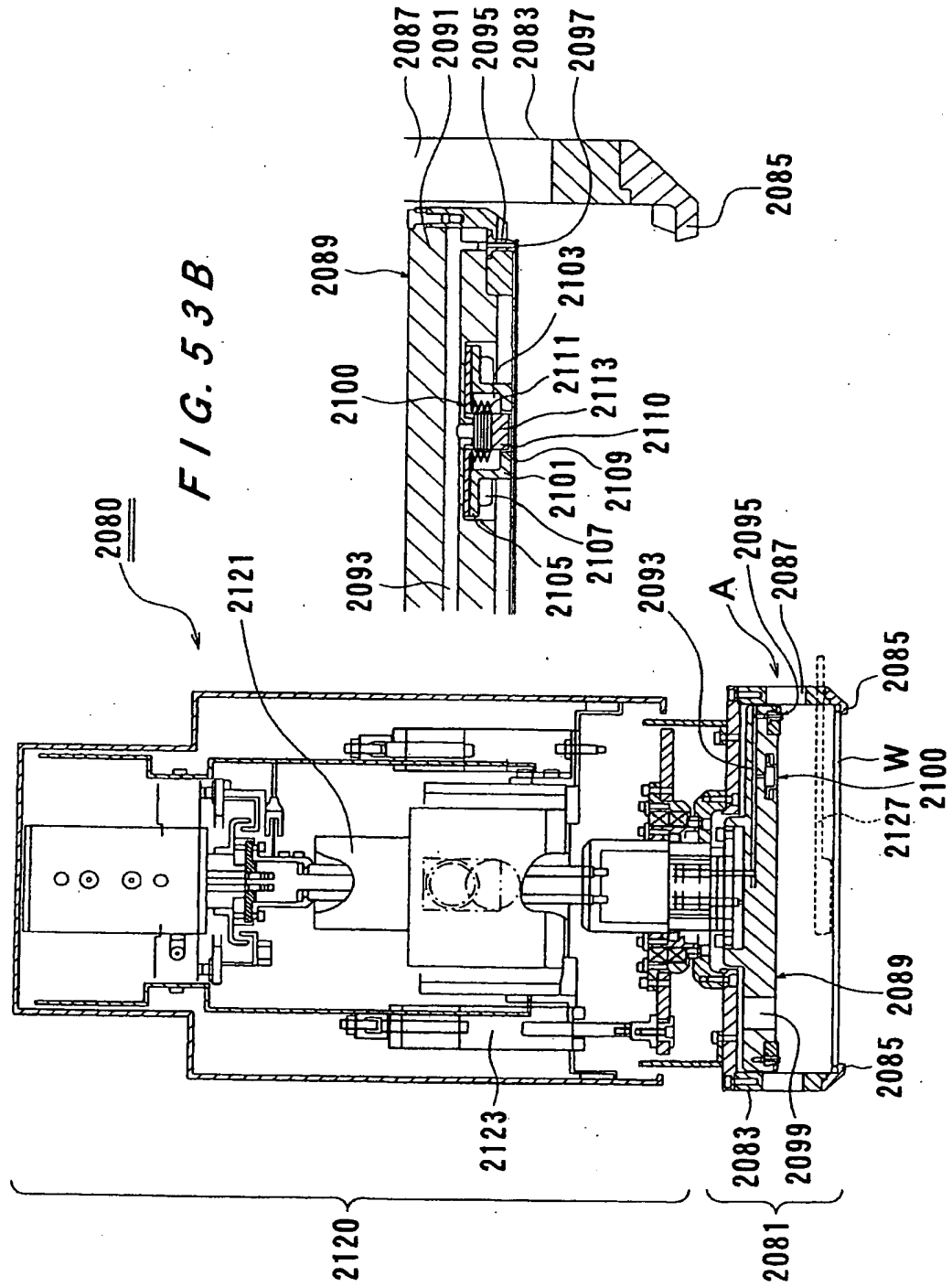
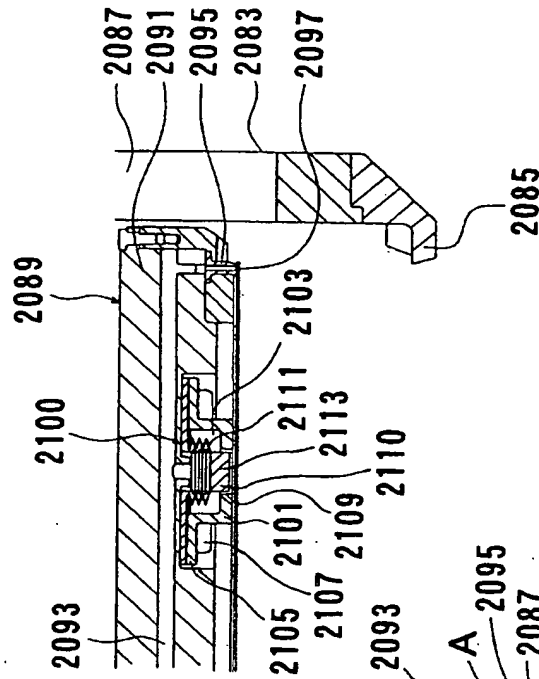
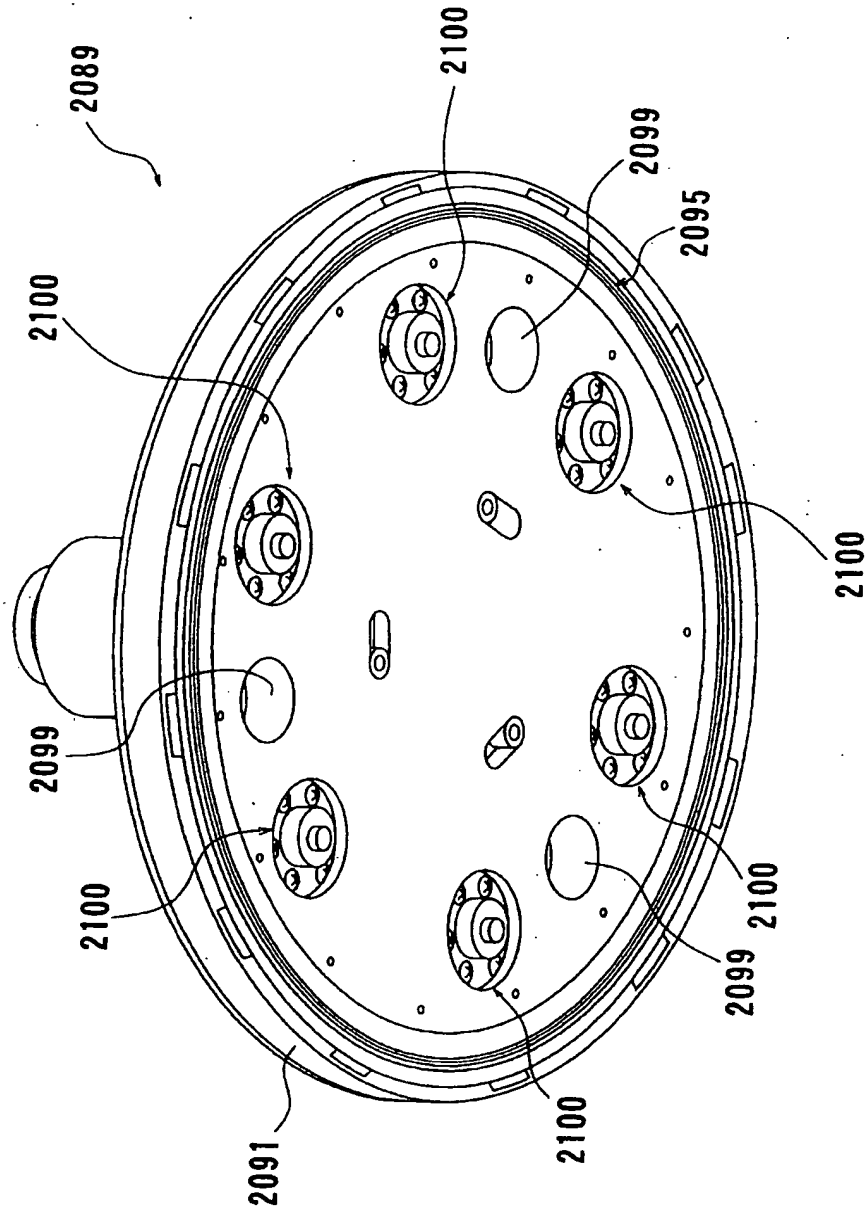


FIG. 53B



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FIG. 54



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FIG. 55A

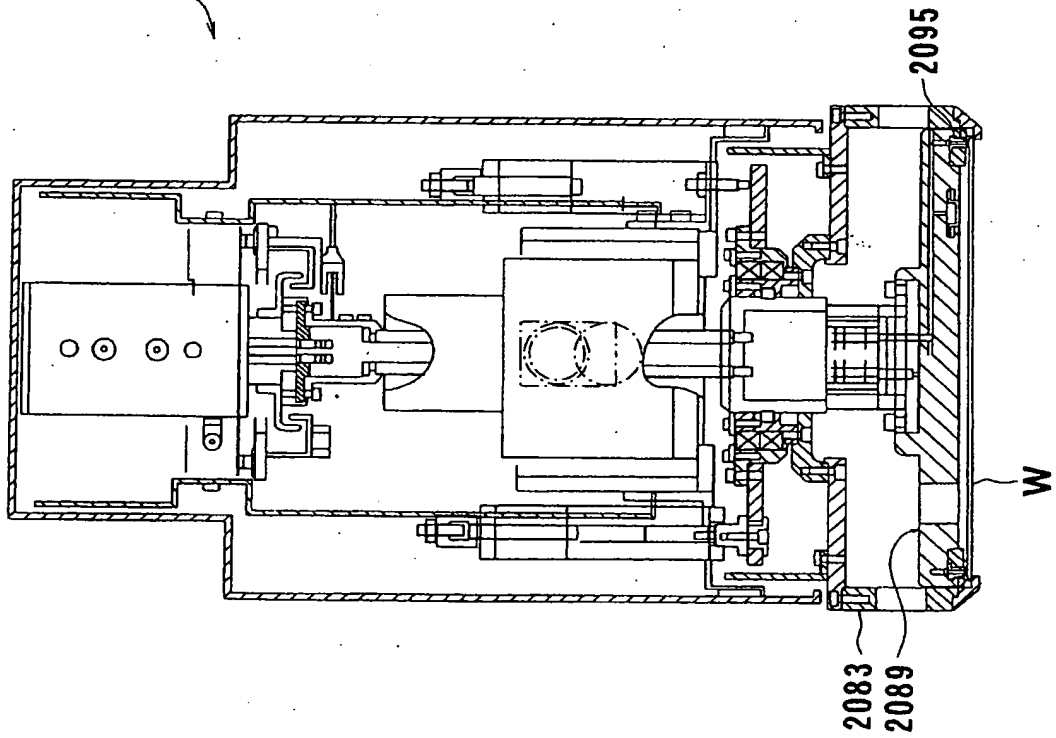
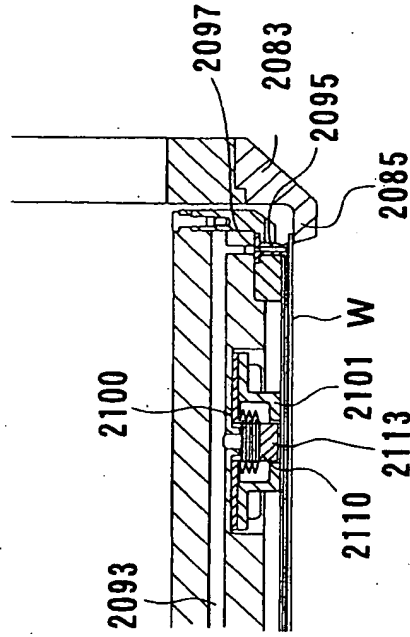


FIG. 55B

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FIG. 56A

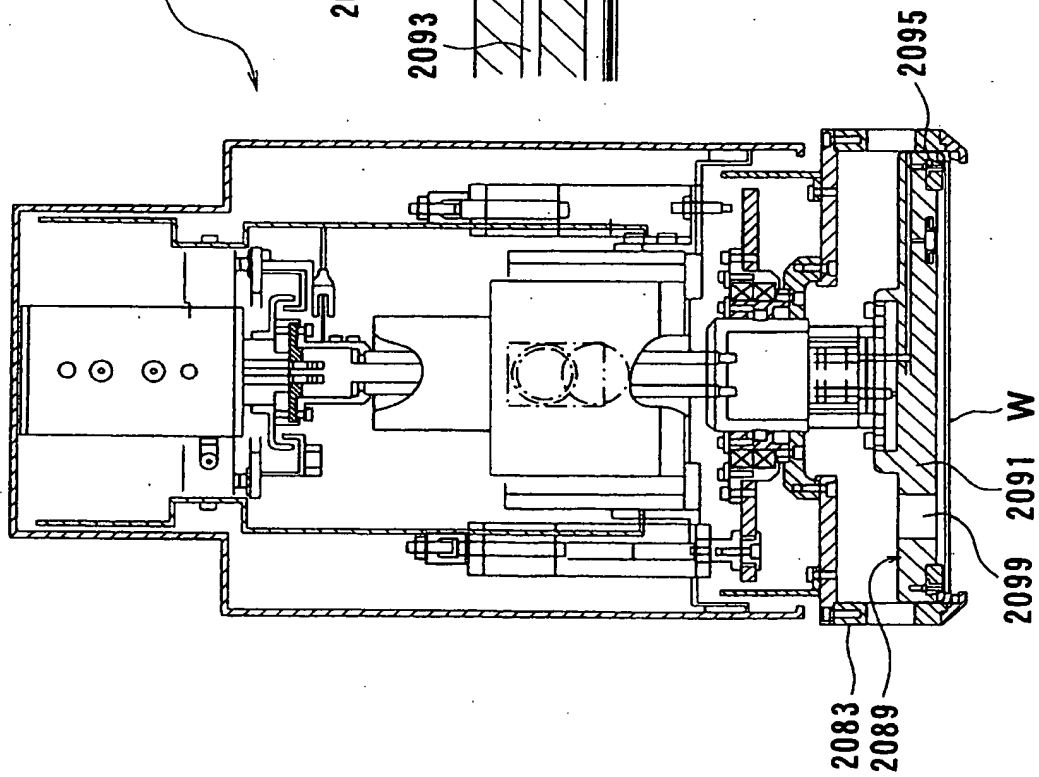
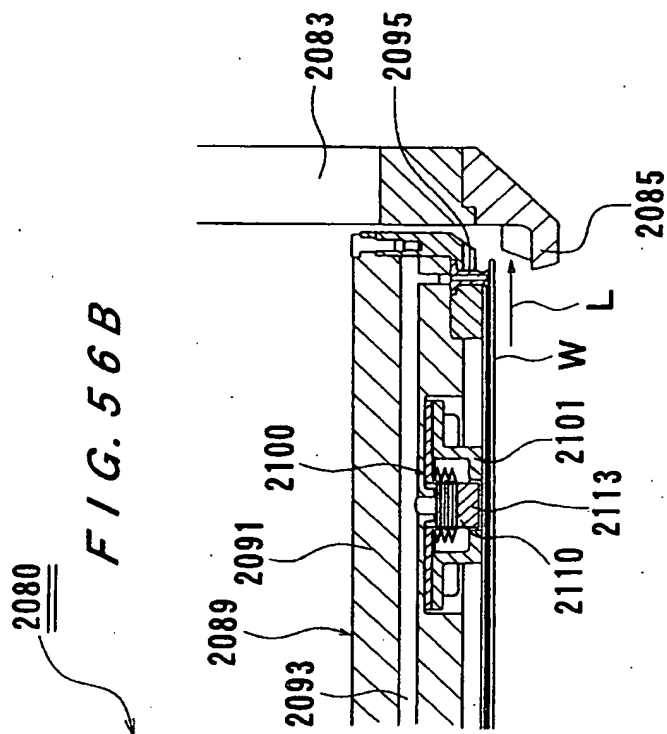


FIG. 56B



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FIG. 57

